

**CAT No. 162- Hilt Collar**  
**K324+ K104**  
**Condition Report**

**Conservation Started:** 14/10/15

**Conservation Finished** 14/10/15

**Conservator:** Kayleigh Fuller

**Time Taken:** 2.5 hours

Including digital photography, report, and conservation.

**Dimensions:** (L) 35.6 mm (W) 18.0 mm (D) 1.8 mm

**Weight before:** K104- 8.55g K324-2.72g

**Weight after:** 10.51g

**Digital photography:**

Taken with a Nikon D60 digital camera, under daylight bulbs and Meiji Techno RZ Stereo microscope with an Infinity 1 camera (with analyses capture software) and fibre optic lights, 7-75x magnification. Taken before, during and after.

**Annotation on any of the storage bags or boxes:** K 104, 21 inside triangle, and 24/7/09 written on box; PN 1971, SSH '09, 21 inside triangle, and 24/7/09 written on fragment of bag contained in box.

**Description:** Visual and microscopic examination using Meiji stereo microscope 7-75x magnification. Please see K 104 – condition report for Paris from 28/9/10.

Hilt-collar in gold with all over garnet cloisonné decoration. Found in 2 fragments cut open, some stones lost/fractured/sunken, but otherwise complete; preserves the general grip form. Constructed of sheet metal.

**Associated Objects:**

**Pre-Conservation Condition:** Visual and microscopic examination using Meiji stereo microscope 7-75x magnification. Please see K 104 – condition report for Paris from 28/9/10.

K104- The present condition of the object closely matches that described in the previous condition report. As noted, it is difficult to see the details of the decoration in untreated areas. It appears that some further cleaning is possible of the garnet cells in the two panels adjacent to the partial panel on the 'front' of the object.

**K324-(2011):** It is apparent that the object is fragmentary, and the cell walls at the right and left edges end abruptly. The bottom edge is significantly distorted. Some of the cells in this area appear to protrude above the outside border, and at least one cell is missing a garnet. Other garnets may be fractured or partially missing, but this will become more visible after cleaning.

**(2013):** Top surface has previously been conserved; the soil on the reverse surface was left in place. The soil contains a significant amount of CuA corrosion products. There is at least 1 possible sheet of CuA visible in the soil, or at the least the corroded remains of CuA sheets.

**Treatment:** Carried out using a Meiji stereo microscope with fibre optic lights and 7-45 X magnification.

**Purpose:** The purpose of this conservation treatment was to further reduce soil deposits on the surface of the garnet decoration prior to analysis of the various components.

**Aim:** Partial cleaning/ Re-assembly

**Materials:** Soft natural/synthetic brushes, cotton swab, cocktail stick, thorn in pin vice/holder, water on garnets, water/IMS on metals, Paraloid B72 in Acetone,

The granular soil on the surface of three garnets was mechanically removed where possible using a fine thorn tip secured in a pin vice and a small pure bristle brush. Water was used to soften the soil to facilitate removal. Loose particles of soil were then removed with a small swab of water. IMS on cotton swabs was used for the surrounding gold areas.

**14/10/2015- K. Fuller**

Both fragments were cleaned a little further. Some broken garnets were carefully consolidated into place with 20% W/V Paraloid B72 (ethyl methacrylate copolymer) in Acetone. The two fragments were re-assembled with 40% w/v Paraloid B72 in Acetone on the joining edges.

**Analysis undertaken**

XRF analysis of the object was performed. See document 'K104 XRF Report'.

**Post-Conservation Condition/Findings:**

It is apparent that there is significant damage to many of the garnets in untreated areas. Although some additional cleaning could likely be undertaken without consolidation, it would be advisable to resume treatment after analysis when unstable components can be consolidated as necessary.

**Samples:**