





Fig. 13abc The red X denotes the starting point of the first coil's unwinding.

Continuing with the first photo in fig. 11a (page 13), an outer layer of cellulose tape that covered the pair of coils together has been removed. There is another wrap of Tesafilm 13x165 covering the individual coils. On this coil, the first one to be dissected, this is the layer of Tesafilm that holds the label in place. See fig. 11b. The label gives the turns count and the wire size for each winding *per bobbin*. That is, 200 and 2000 are the total turns count for one bobbin, not both together. The label also has the serial number for the coil assembly written on it. Underneath the label is another wrap of Tesafilm 13x165, fig. 11c. After the wrap under the label is removed what remains can be seen in the scans in figs. 13abc.

Frugal is a word that comes to mind when it comes to the quantity of materials used in these. All insulation wraps were done with very little overlap. All of the pieces of hold down tape are only large enough to do the job and no larger.

Careful examination of the photos in figs. 13abc show clearly that these coils are not the byproduct of precision mechanics. In fact it will be shown that the distribution of the of the wraps of wire was much more random, at least in terms of how the individual compartments were filled. An automated mechanical winding machine normally wraps wire in a very neat and clean side by side fashion. Generally, unless a coil is specifically random wound, the winding machine's (WM) traverse will lay wire side by side for X number of winds in one direction, then the traverse will reverse and the machine will lay down a layer of X number of winds, side by side, over the previous layer. In the BV coils that I have rewound the individual compartments are much more randomly filled as can be seen on the winding profiles in the scans (larger view p. 17). Also, the winding counts from compartment to compartment are not usually the same as their second coil counterpart and also vary somewhat from the original winding sheets. The total wind counts are close to the winding sheets however.