

1 Scope:

This procedure describes the methods for repairing damage to the Kapton cable insulation that occasionally occurs during the winding, curing, measuring or handling of a coil.

2 Applicable Documents:

The following documents in effect on the date of issue of this specification form a part of this specification.

RHIC-MAG-Q-1004	Discrepancy Reporting Procedure
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3 Requirements:

3.1 Material/Equipment:

<u>Specification Reference</u>	<u>Technical Reference</u>	<u>Source/Control</u>
Kapton Tape	Kapton Tape .001 thick, .0015 adhesive	R.H. Carlson P.O. Box 1687 Greenwich, CT.
No-Arc	Electrical Insulating Compound	BNL Stock #I-73120

3.2 Procedure:

This procedure applies to insulation damage to a single turn only. It does not consider any cases in which the superconducting cable is damaged or any cases in which a damaged area spans more than one turn on the coil.

3.2.1 When damage to the insulation on a coil is discovered, examine the area to determine if it meets the following criteria and can therefore be repaired according to this procedure.

1. No cable damage
2. Damaged area less than .25 x .25
3. No more than 3 damaged areas per coil
4. No damaged area spans more than one turn

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RHIC-MAG-R-7337-A

Page 2 of 2

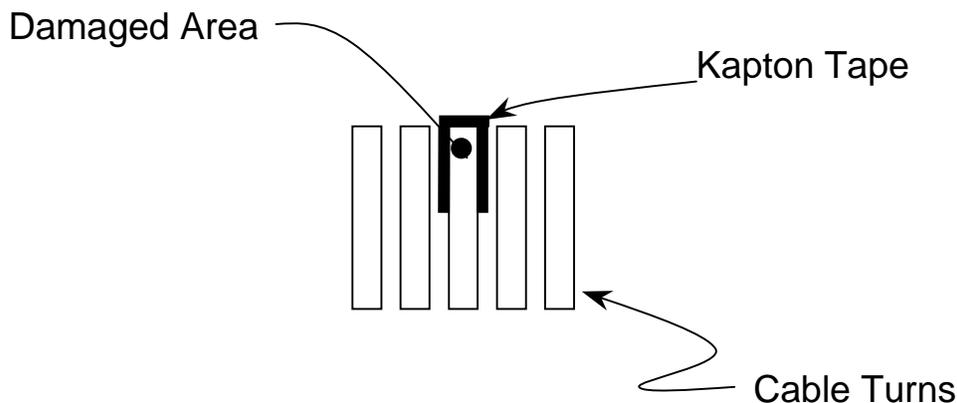
If there is any question as to whether the damage should be repaired in accordance with this procedure, contact the cognizant engineer.

3.2.2 Typical insulation damage may be patched with a piece of Kapton tape such that the tape extends approximately .25" past the damage in all directions.

3.2.3 The following is a list of special cases with the corresponding repair for each:

3.2.3.1 Exposed cable on the coil ID - Apply no arc prior to patching with Kapton tape.

3.2.3.2 Damage prior to curing - Separate the turns and form a cap with the Kapton tape over the turn with the damage as per the sketch below:



3.2.3.3 Bunched insulation at saddle tips, no cable exposed - No repair required.

3.2.3.4 Bunched insulation at saddle tips, cable exposed - Apply no arc and patch with Kapton tape.

4 Quality Assurance:

4.1 If a repair was made, record in the traveler in the line directly below the operation at which the damage was discovered, the type and location of the repair.

5 Preparation for Delivery:

N/A