

July 16, 1996 Rev O

INSULATOR KIT, UNDERCARPET

1. Introduction

1.1 Purpose

Testing was performed on AMP® Undercarpet Insulator Kit to determine its conformance to the requirements of AMP Product Specification 108-1306 Rev. O.

1.2 Scope

This report covers the electrical and environmental performance of the Undercarpet Insulator Kit manufactured by Building Cabling Products. The testing was performed between Feburuary 1996 and May 1996.

1.3 Conclusion

The Undercarpet Insulator Kit, listed in paragraph 1.5, meet the electrical and environmental performance requirements of AMP Product Specification 108-1306 Rev O.

1.4 Product Description

The AMP Undercarpet Insulator Kit is designed to protect undercarpet power cable from floor moisture around the Tap Assemblies and Splice Assemblies during undercarpet power system installations. The material is polyvinyl chloride sheet, .25mm (.010 inch) thick, with adhesive backed foam covered with a release liner.

1.5 Test Samples

The test samples were randomly selected from normal current production lots, and the following part numbers were used for test:

Test Group 1A	<u>Quantity</u> 5 18 5 1 1	Part Nbr-Rev. 556411-1 (O) 553454-1 (S) 3-553079-3 (AY) 554181-1 (M) 58073-1 (K)	<u>Description</u> Undercarpet Power Insulator Kit 12 AWG Splice Assemblies 12 AWG, 3-conductor, 4 foot Flat Cable 5C Power Whip Hand Crimping Tool
1B	5	556411-1 (O)	Undercarpet Power Insulator Kit
	18	553455-2 (E)	12 AWG Tap Assemblies
	5	3-553239-3 (AF)	12 AWG, 5-conductor, 6 foot Flat Cable
	5	3-553079-3 (AY)	12 AWG, 3-conductor, 4 foot Flat Cable
	5	554181-1 (M)	5C Power Whip
	1	58073-1 (K)	Hand Crimping Tool
1C	5	556411-1 (O)	Undercarpet Power Insulator Kit
	18	553455-2 (E)	10 AWG Tap Assemblies
	5	3-553447-3 (AD)	10 AWG, 5-conductor, 6 foot Flat Cable
	5	3-553445-3 (Y)	10 AWG, 3-conductor, 4 foot Flat Cable
	5	554181-1 (M)	5C Power Whip
	1	58073-1 (K)	Hand Crimping Tool

ACL 1260-275 Unrestricted



1.6 Qualification Test Sequence

Test or Examination	Test Group
	Test Sequence (a)
Examination of Product	1,3
Dielectric Withstanding Voltage	2

(a) Numbers indicate sequence in which tests are performed.

2. Summary of Testing

2.1 Examination of Product

All samples submitted for testing were selected from normal current production lots. They were inspected and accepted by the Product Assurance Department of the Building Cabling Products of Communications Business.

2.2 <u>Dielectric Withstanding Voltage</u>

No dielectric breakdown or flashover occurred when a test voltage was applied between adjacent conductors.

Test Methods

3.1 Examination of Product

Product drawings and inspection plans were used to examine the samples. They were examined visually and functionally.

3.2 <u>Dielectric Withstanding Voltage</u>

The insulator kit encapsulated the splice assemblies and the tap assemblies on the flat cable test samples. The splice and tap assemblies were then immersed in 10 millimeters of tap water for 1 hour before measurements were taken. Measurements were taken during immersion. A test potential of 1500 vac was applied between the adjacent conductors and the leakage current was set at 1.3 milliamps. This potential was applied for one minute and then returned to zero.



4. Validation

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Product Qualification Test and Reliability Automotive/Consumer Group Test Laboratory

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