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COMPATIBILITY OF REFRIGERANTS AND LUBRICANTS WITH MOTOR MATERIALS

Photographs of Motor Materials after Exposure to Refrigerants and Refrigerant-Lubricants
Volume IV

Robert Doerr and Stephen Kujak

The Trane Company
3600 Pammel Creek Road
La Crosse, Wisconsin 54601-7599

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COMPATIBILITY OF REFRIGERANTS AND LUBRICANTS WITH MOTOR MATERIALS

Photographs of Motor Materials after Exposures to Refrigerants and Refrigerant-Lubricants Volume IV

Because of the large scope of this project and the large amount of data recorded, the final report is divided into four volumes.

Volume IV contains the photographs of motor materials after exposures to pure refrigerants and to refrigerant-lubricant combinations.

Volume I contains the abstract, scope, discussion of results, charts of motor material compatibility, test procedures, material identifications and 84 pages of data summary tables. This volume provides results of the study and other information of interest to most users of the information.

Volume II contains all the recorded measurements from the tests on the motor materials after exposures to the 11 pure refrigerants and to nitrogen at the same temperatures.

Volume III contains all the recorded measurements from the tests on the motor materials after exposure to the 17 refrigerant-lubricant combinations and to nitrogen at the same temperatures.

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Volume IV

APPENDIXES(Photographs of Motor Materials)

Appendix A

Photographs of Motor Materials after Exposure to HCFC-22.

Photograph Identification

Photo #	Description
1	Y-833 vanish disks after exposure 500 hour exposure to R-22. The Y-883 varnish is crazed.
2	Sheet insulations(top to bottom) Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to R-22.
3	Helical Coils after exposure to R-22 and after bond strength testing.
4	Sheet insulations(top to bottom) Melinex, Nomex Mica and Nomex after 500 hour exposure to R-22.
5	Tie Cord after 500 hour exposure to R-22 and after break load testing.
6	Lead Wires after 500 hour exposure to R-22 and after dielectric testing.
7	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-22
8	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-22.
9	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to R-22.
10	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to R-22 plus the 24 hour air bake at 302°F.
11	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to R-22 plus the 24 hour air bake at 302°F.
12	Lead Wires after 500 hour exposure to R-22 plus the 24 hour air bake at 302°F and after dielectric testing.
13	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-22 plus a 24 hour air at 302°F
14	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-22 plus the 24 hour air bake.
15,16,17,18 19 and 20	Close-ups of U-475, Y-390, ER-610, Y-833, 923 and Iso-800 after the 500 hour exposure to R-22 plus a 24 hour air bake.

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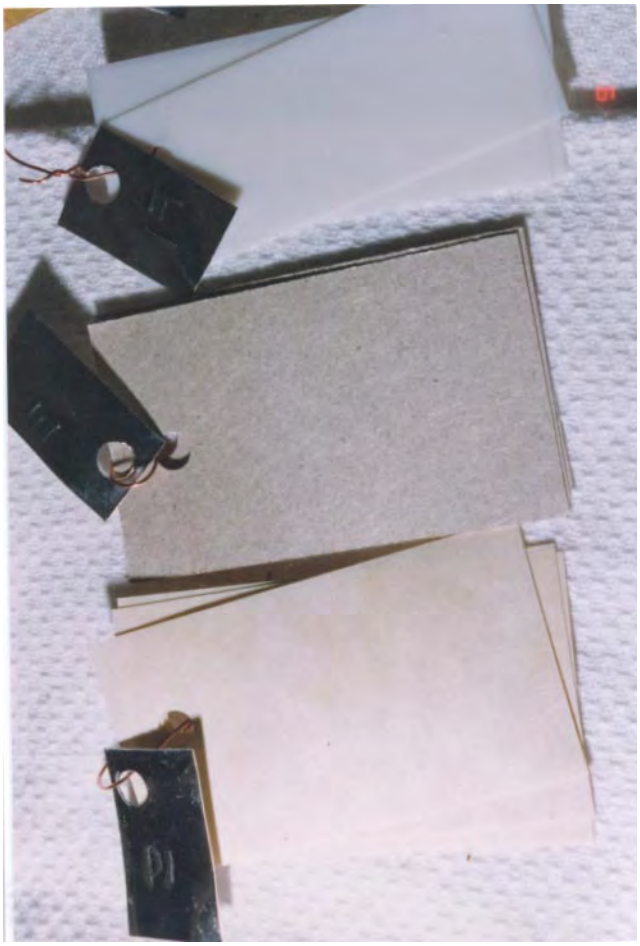

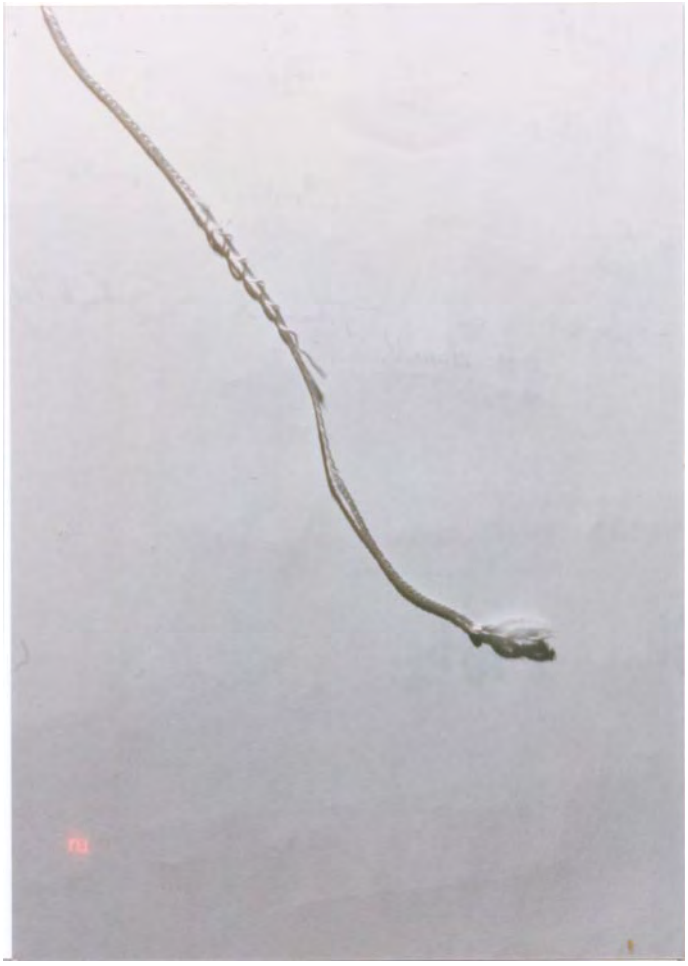

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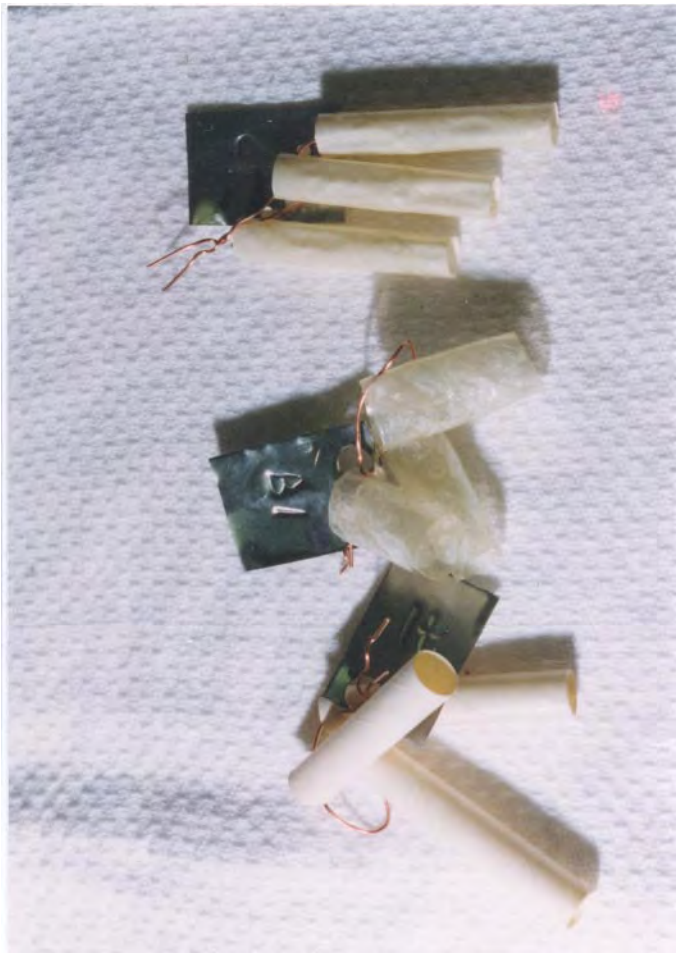

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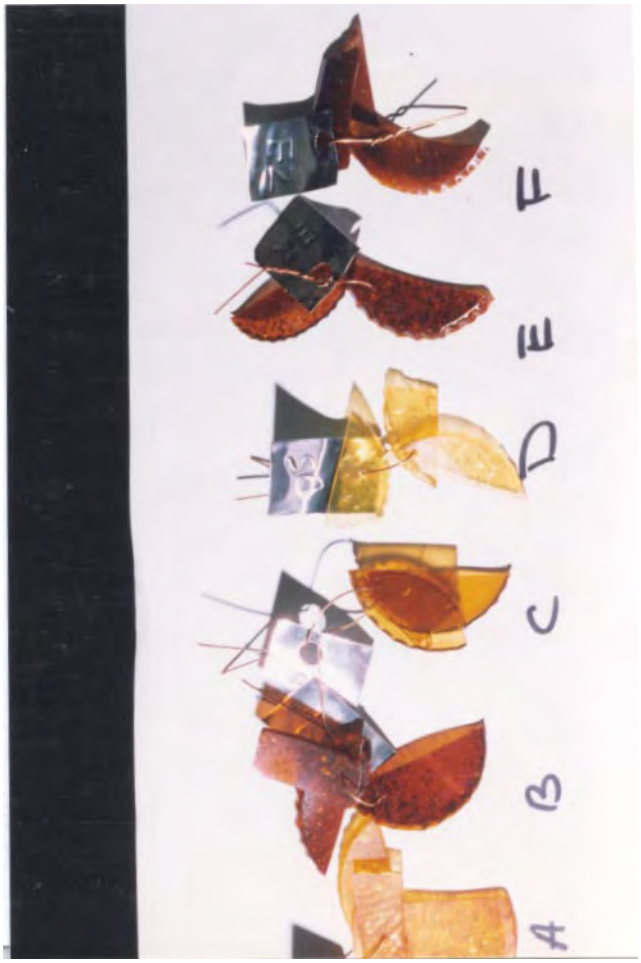

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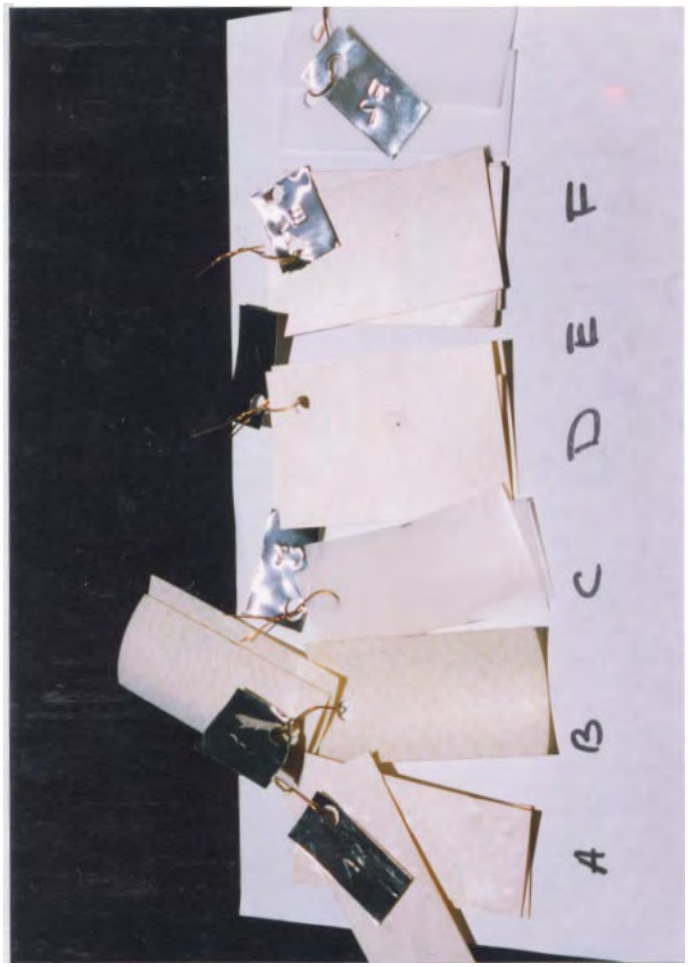

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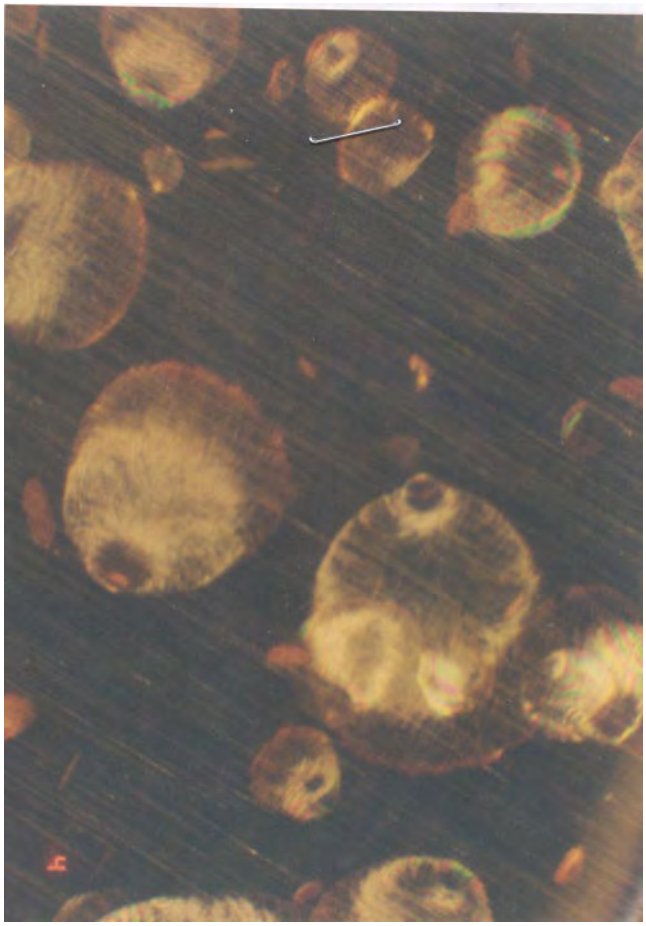

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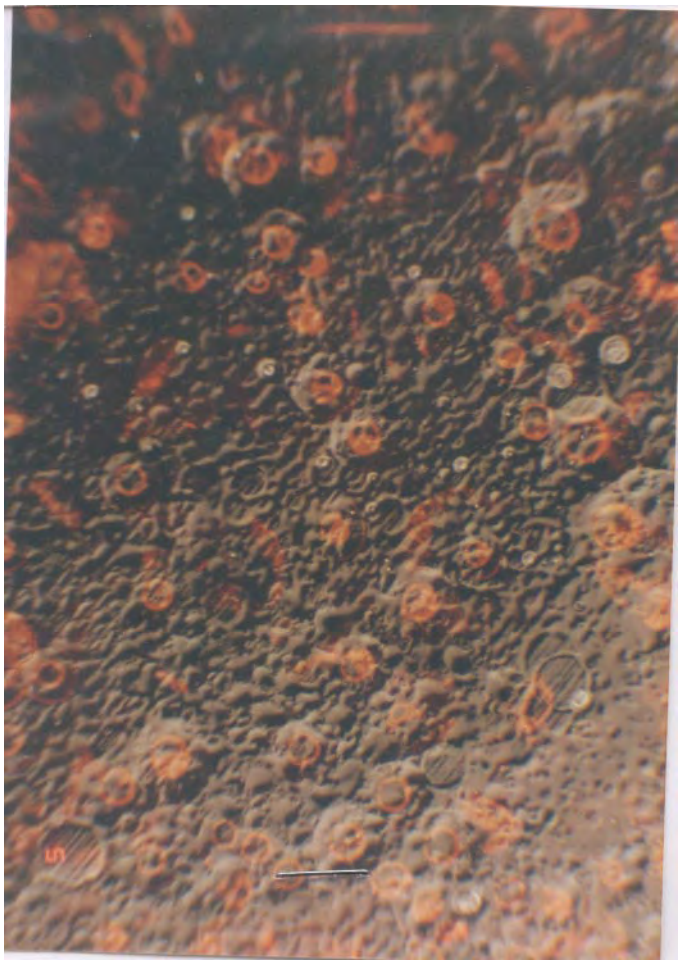

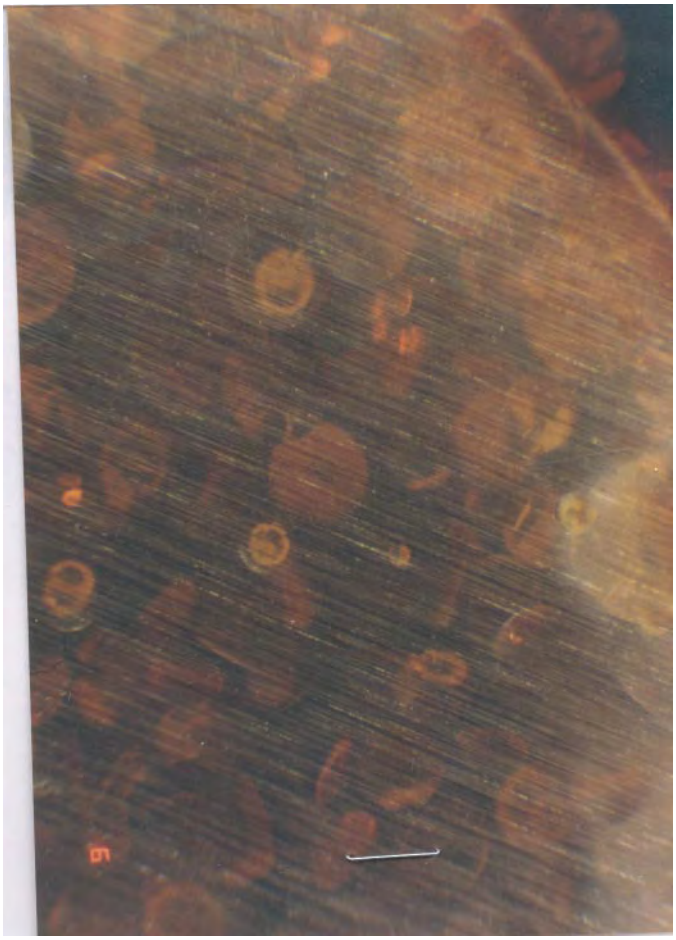

Appendix B

Photographs of Motor Materials after Exposure to HCFC-123.

Photograph Identification

Photo #	Description
1	R-123 liquid after exposure to the motor materials.
2	Sheet Insulations, tapes and tie cord after 500 hour exposure to the R-123.
3	Varnish disks, lead wires and sleeving after 500 hour exposure to the R-123.
4	Varnish disks after 500 hour exposure plus the 24 hour air bake.
5	Nomex/Mylar/Nomex and Dacron/Mylar/Dacron sheet insulation after 500 hour exposure plus the 24 hour air bake.
6	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to R-123 plus the 24 hour air bake at 302°F.
7	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-123 plus a 24 hour air at 302°F
8	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-123 plus the 24 hour air bake.
9	Lead Wires after 500 hour exposure to R-123 plus the 24 hour air bake at 302°F and after dielectric testing.
10	Permacel tape after 500 hour exposure to R-123 plus the 24 hour air bake 302°F.

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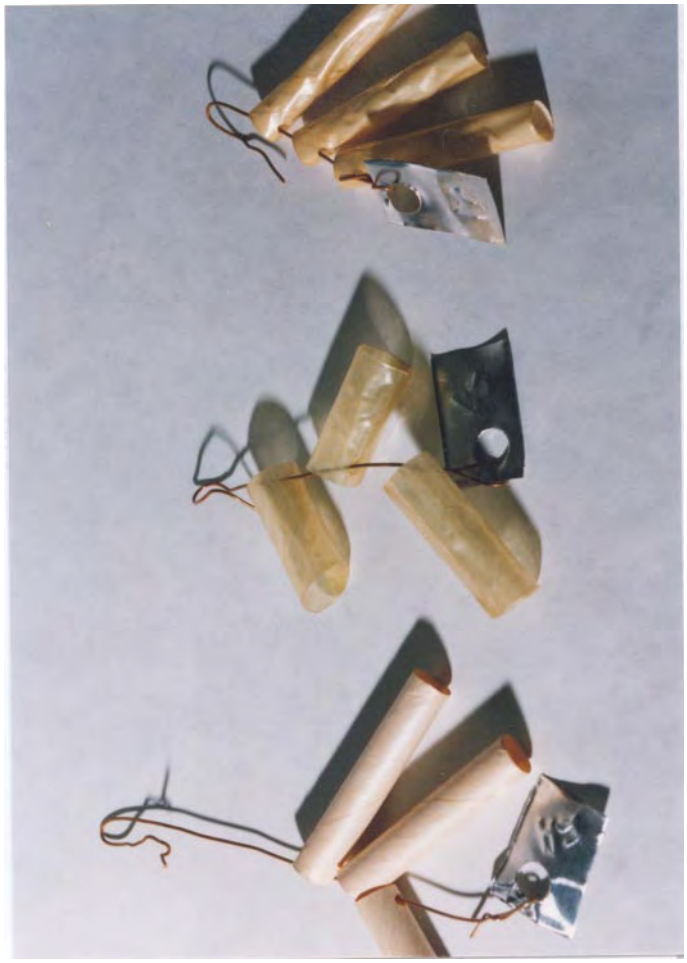

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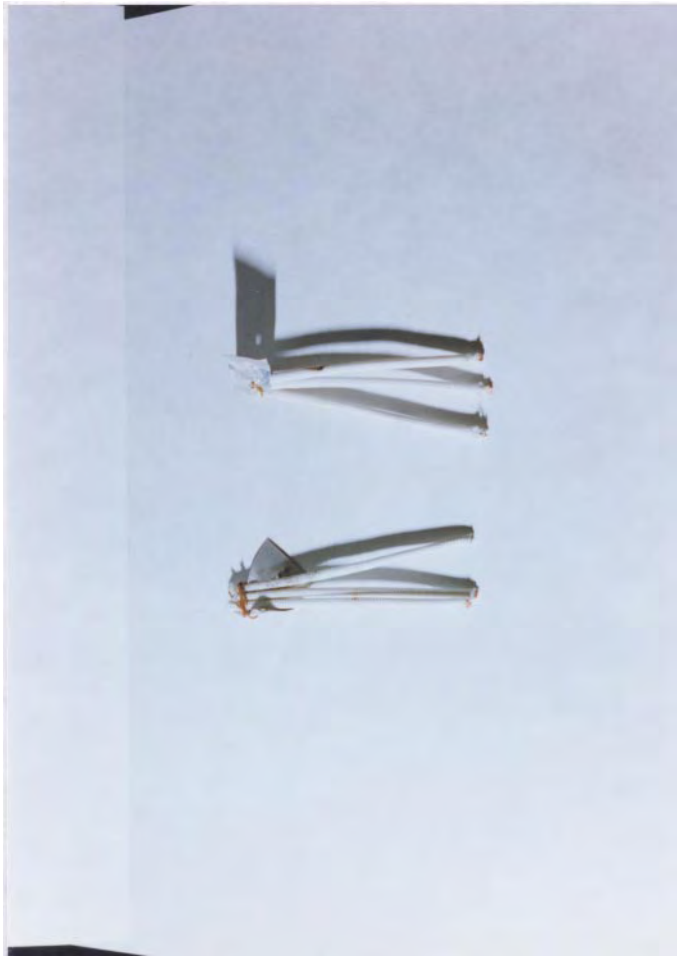

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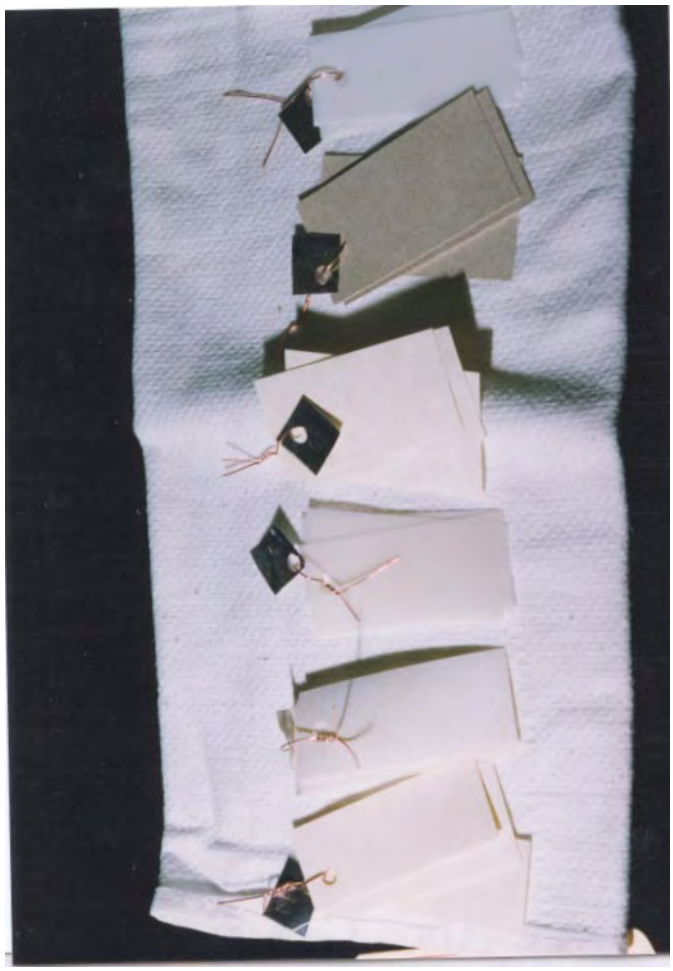
Appendix C

Photographs of Motor Materials after Exposure to HCFC-124.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to R-124.
2	Tie cords after 500 hour exposure to R-124
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-124.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-124.
5	Lead Wires after 500 hour exposure to R-124.
6	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to R-124 .
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to R-124.
8	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to R-124 plus 24 hour air bake.
9	Tie cords after 500 hour exposure to R-124 plus the 24 hour air bake.
10	Y-833 varnish after 500 hour exposure to R-124 plus the 24 hour air bake.
11	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to R-124 plus the 24 hour air bake.
12	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-124 plus the 24 hour air bake.
13	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-124 plus the 24 hour air bake.
14	Lead Wires after 500 hour exposure to R-124 plus the 24 hour air bake.



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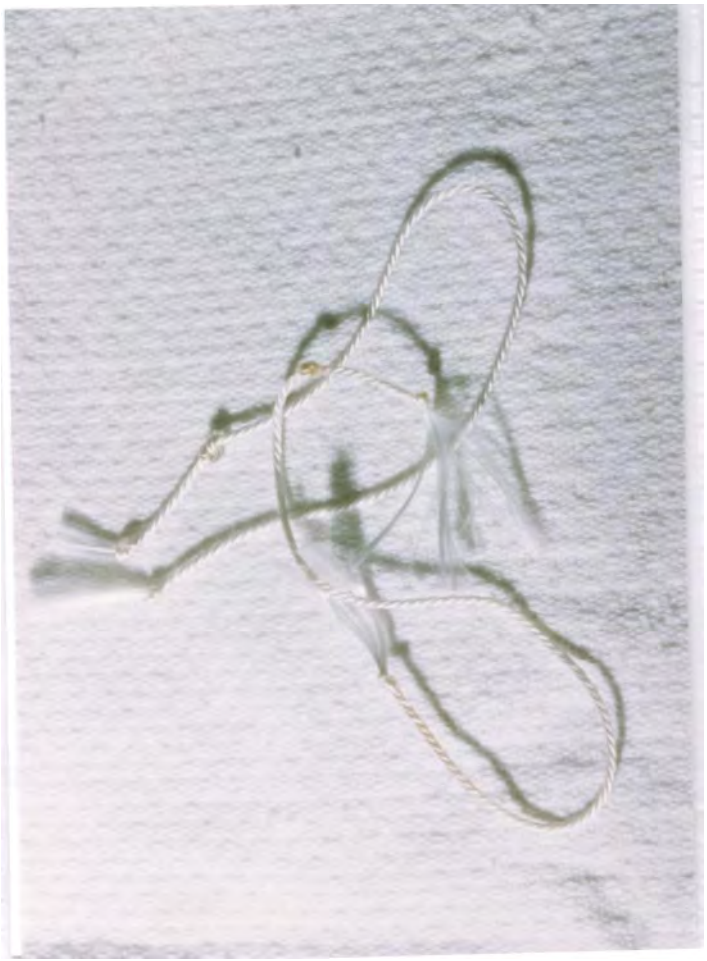

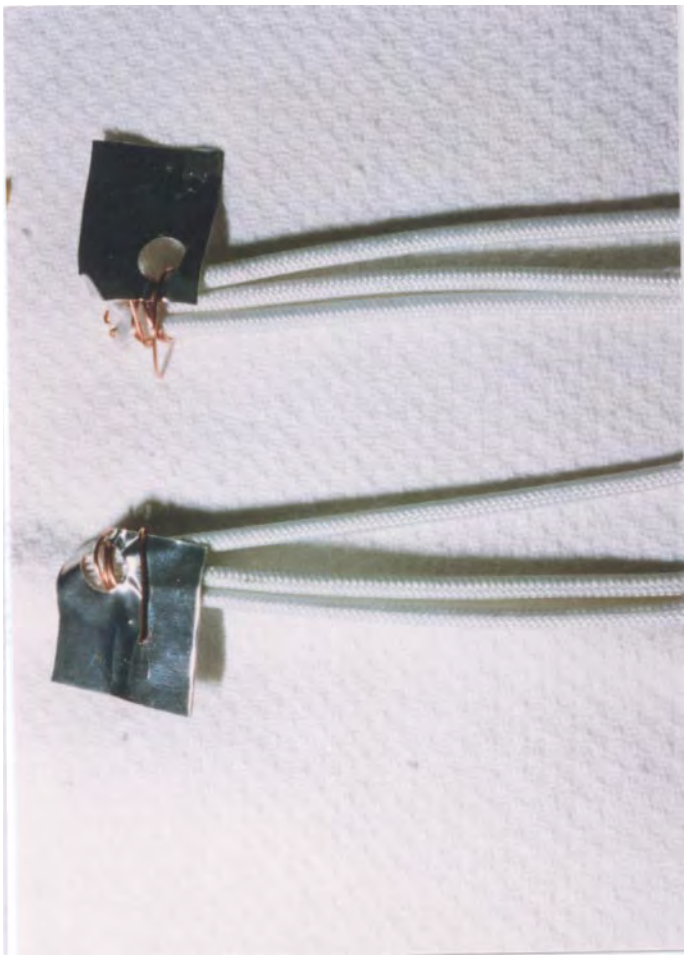

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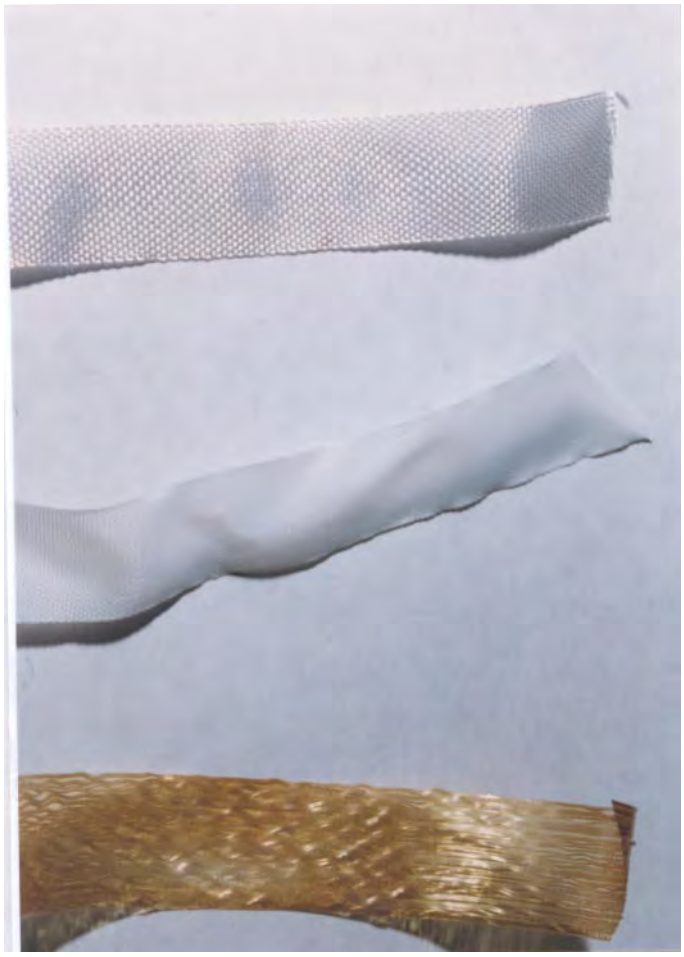

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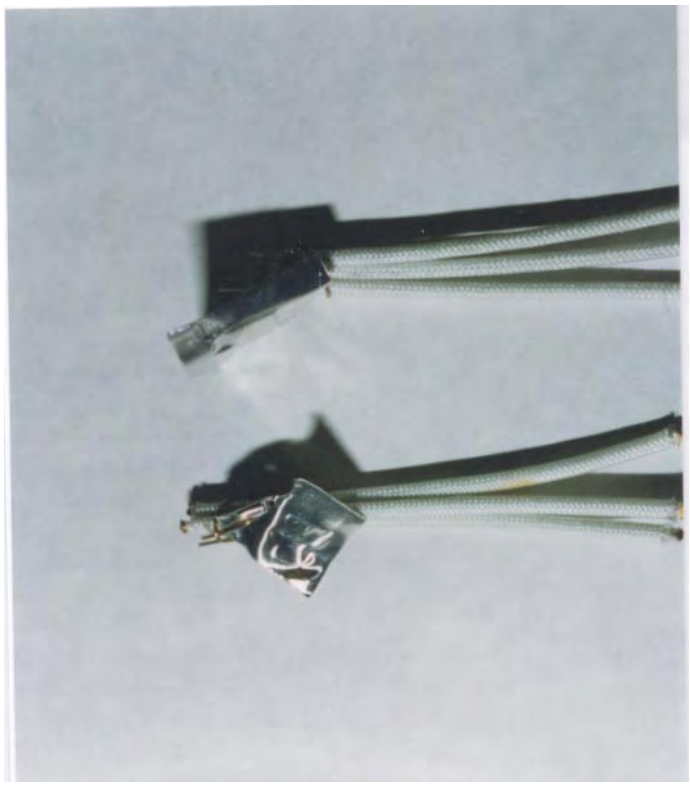
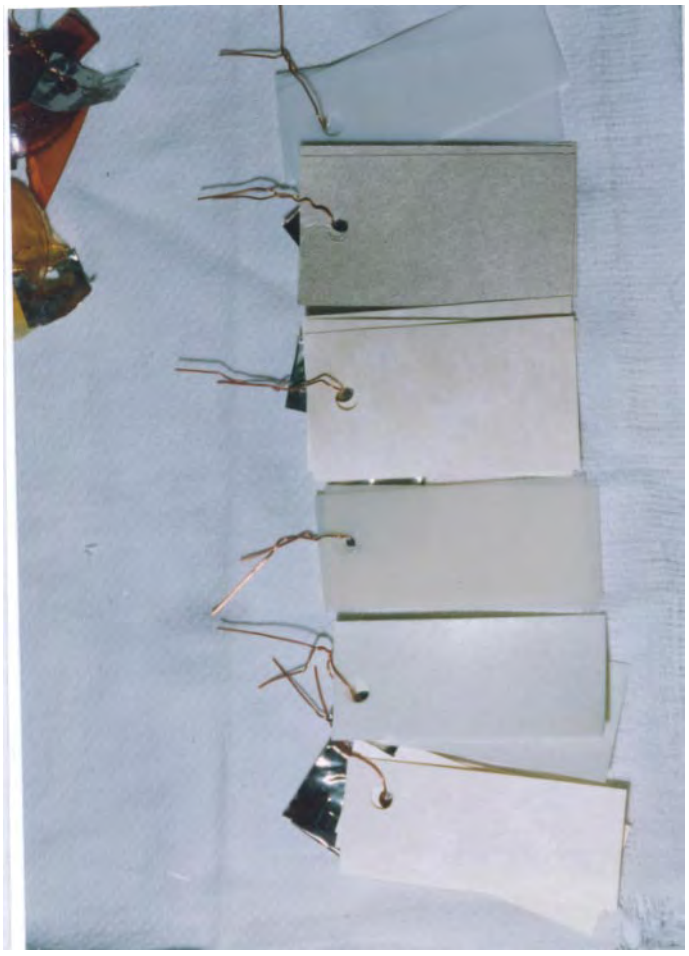


Appendix D

Photographs of Motor Materials after Exposure to HCFC-142b.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to R-142b.
2	Tie cords after 500 hour exposure to R-142b.
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-142b.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-142b.
5	Lead Wires after 500 hour exposure to R-142b.
6	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to R-142b plus after 24 hour air bake.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to R-142b.
8	Sheet Insulation(top to bottom)Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to R-142b plus a 24 hour air bake.
9	Tested Tie cords after 500 hour exposure to R-142b plus the 24 hour air bake.
10	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-142b plus the 24 hour air bake.
11	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-142b plus the 24 hour air bake.
12	Lead Wires after 500 hour exposure to R-142b plus the 24 hour air bake.



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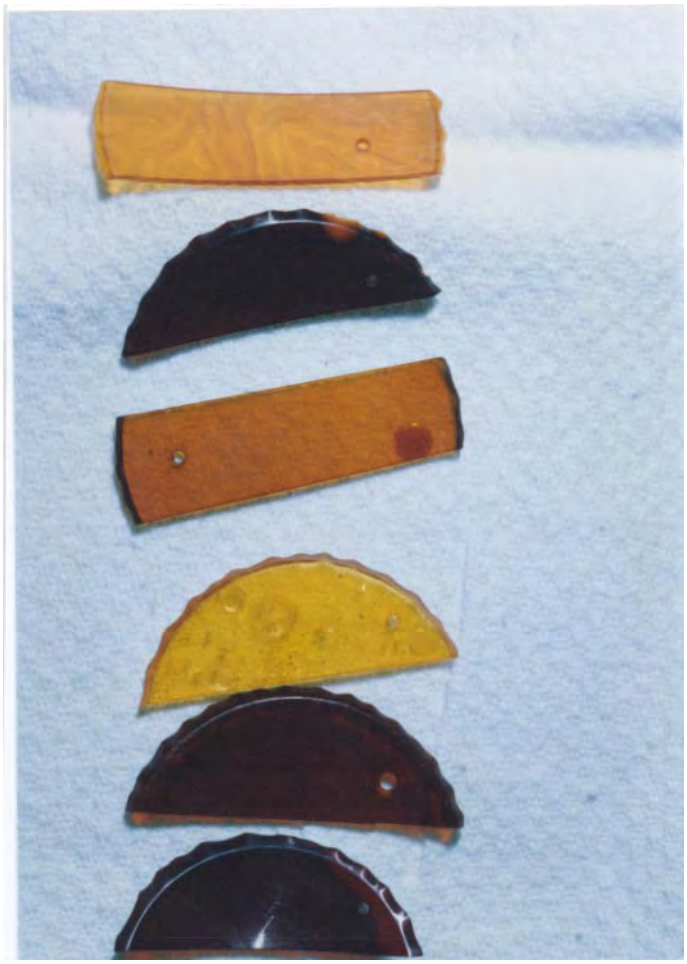

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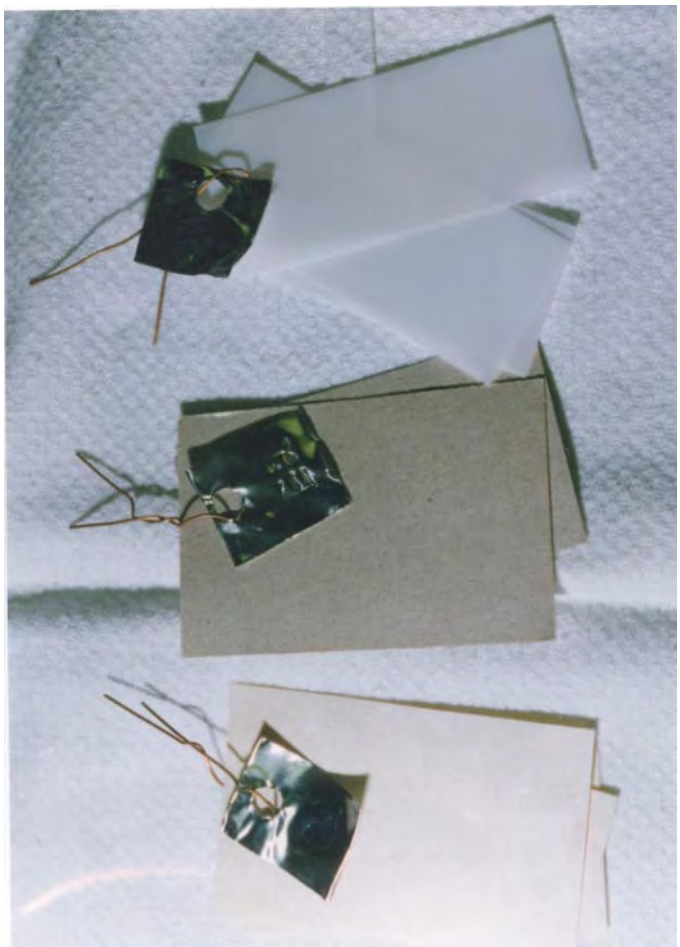

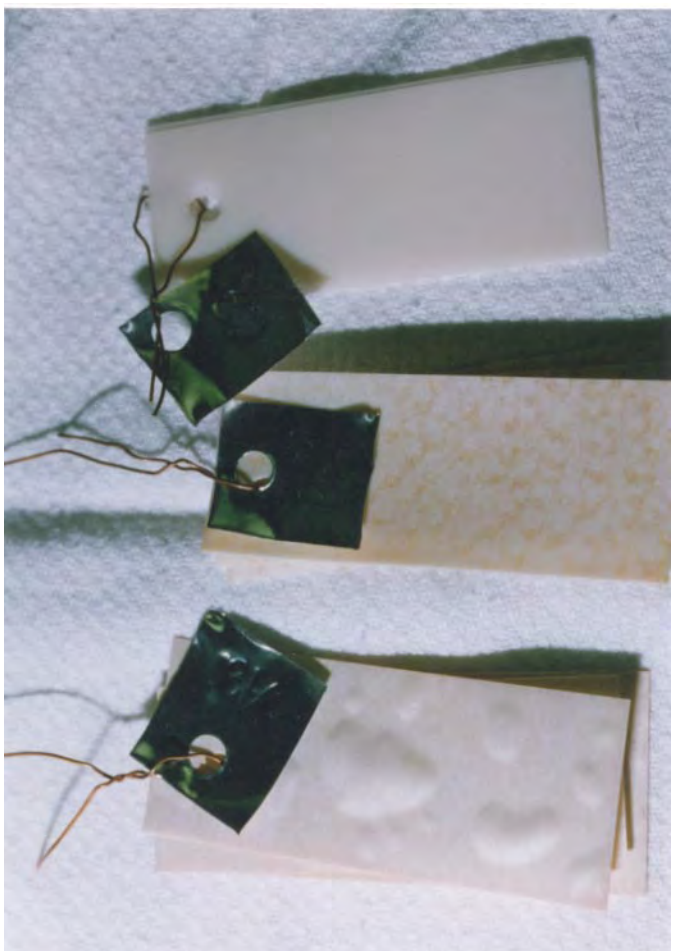

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Photograph #11(above)
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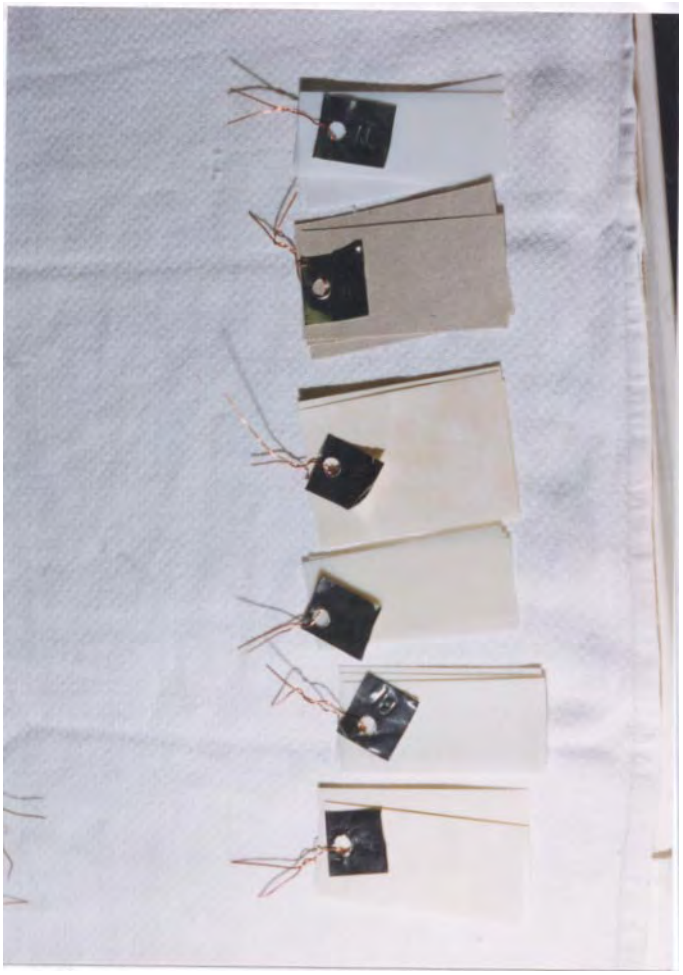
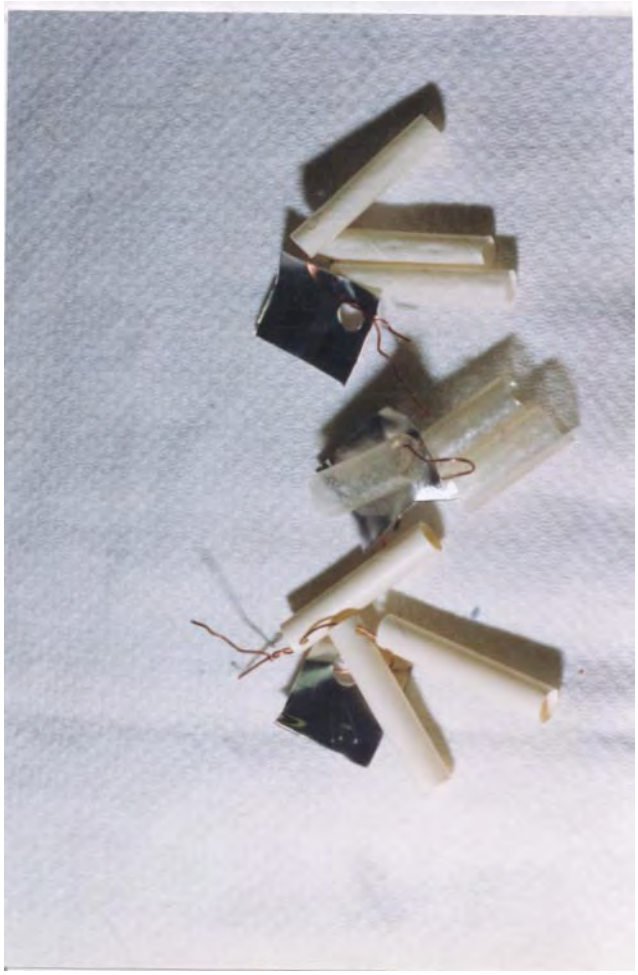
Appendix E

Photographs of Motor Materials after Exposure to HFC-152a.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to R-152a.
2	Tie cords after 500 hour exposure to R-152a.
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-152a.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-152a.
5	Lead Wires after 500 hour exposure to R-152a.
6	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to R-152a plus a 24 hour air bake.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to R-152a.
8	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to R-152a plus the 24 hour air bake.
9	Tested Tie cords after 500 hour exposure to R-152a plus the 24 hour air bake.
10	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-152a plus the 24 hour air bake.
11	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-152a plus the 24 hour air bake.
12	Lead Wires after 500 hour exposure to R-152a plus the 24 hour air bake.





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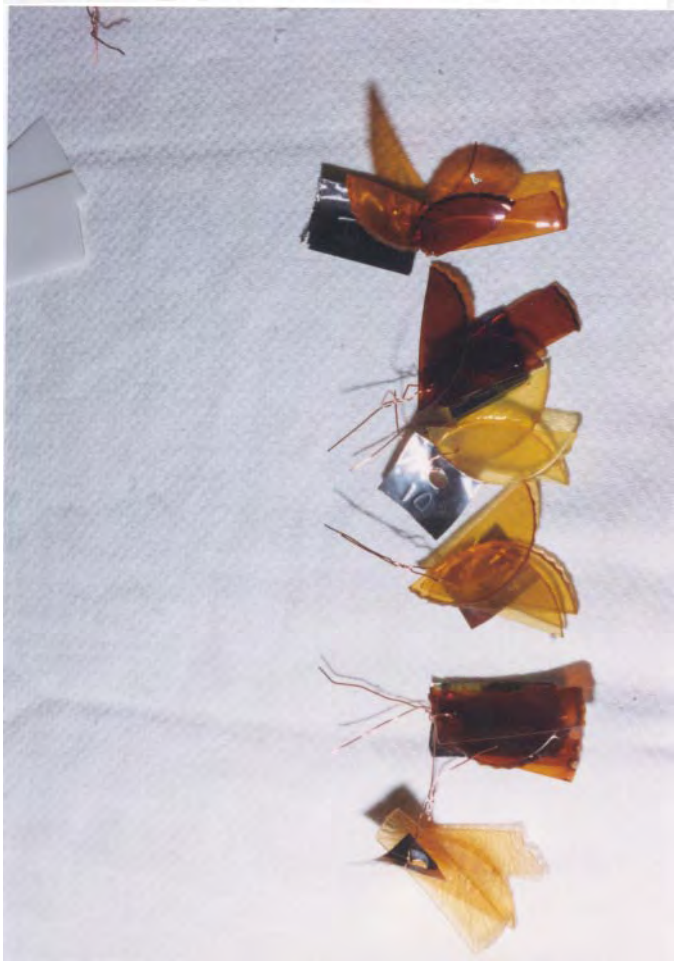

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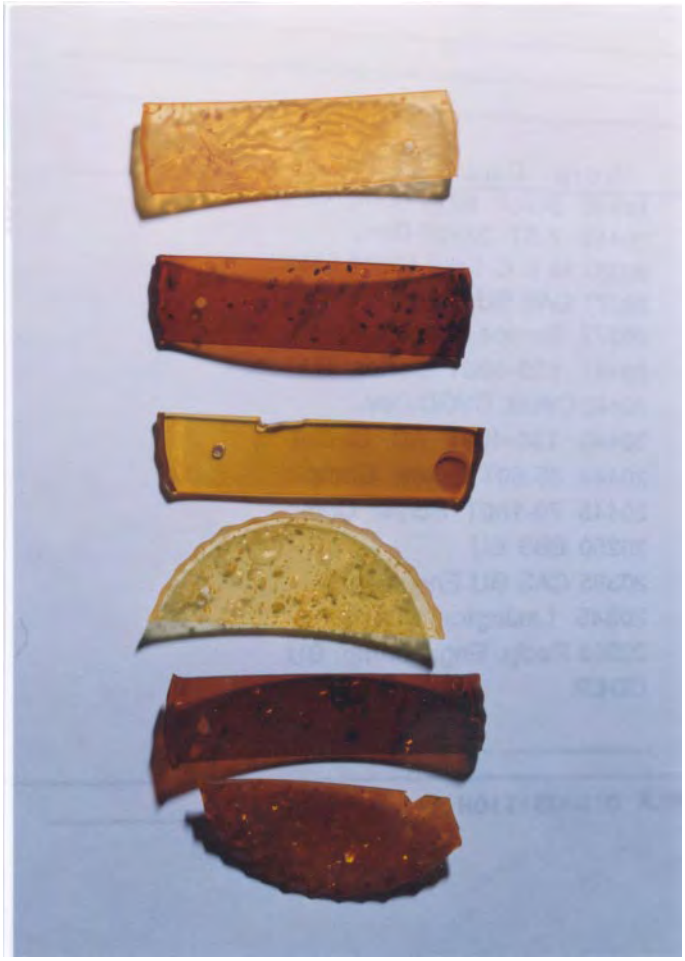

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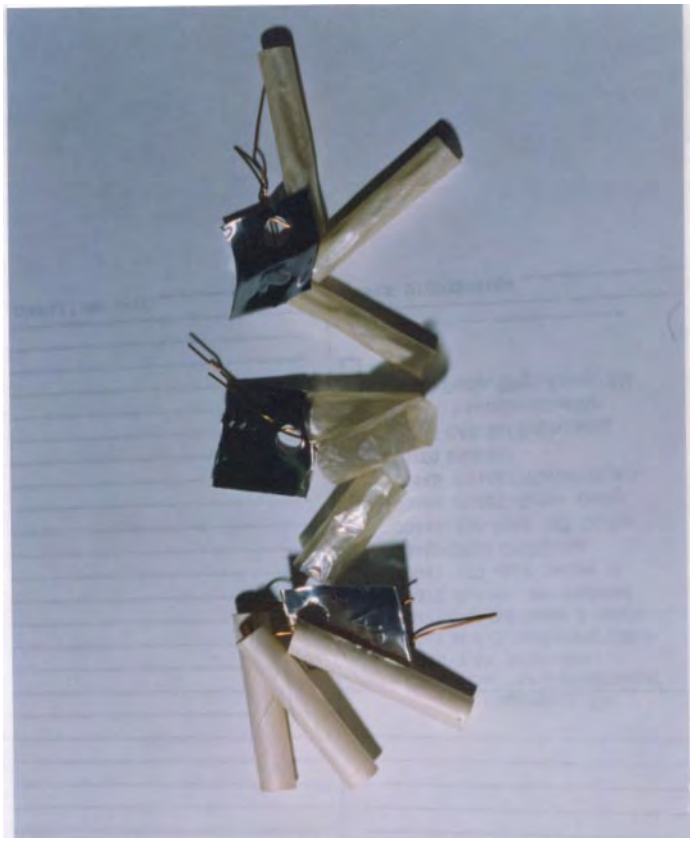

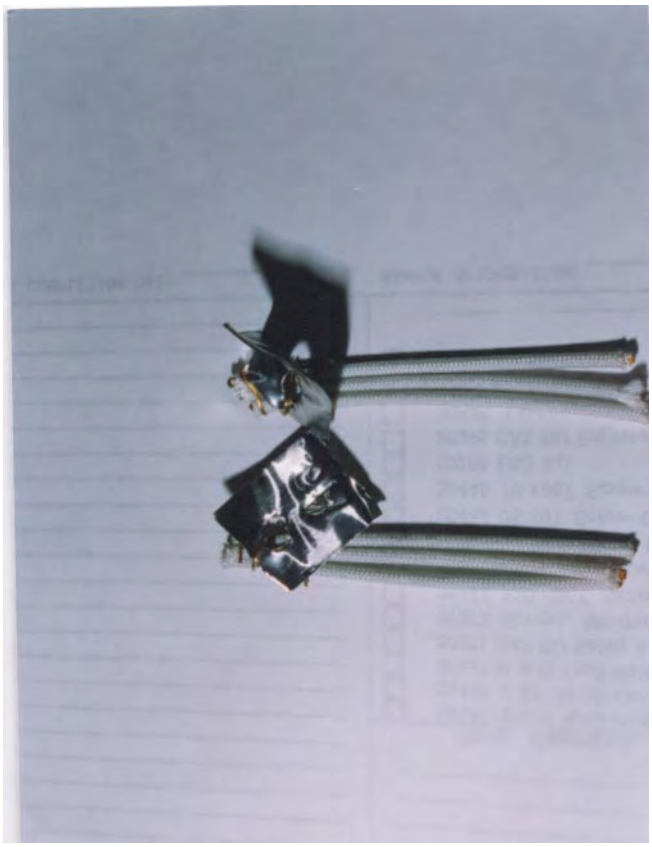

Appendix F

Photographs of Motor Materials after Exposure to HFC-134a.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom-Right) Melinex, Nomex-Mica, Nomex,(top to bottom-left) Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to R-134a.
2	Tie cords after 500 hour exposure to R-134a.
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-134a.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-134a.
5	Lead Wires after 500 hour exposure to R-134a.
6	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to R-134a plus a 24 hour air bake.
7	Varnish Disks(top to bottom-right) Iso-800, 923, Y-833,(top to bottom-left) ER-610, Y-390 and U-475 after 500 hour exposure to R-134a.
8	Varnish Disks(top to bottom-right) Iso-800, 923, Y-833,(top to bottom-left)ER-610, Y-390 and U-475 after 500 hour exposure to R-134a plus the 24 hour air bake.
9	Tested Tie cords after 500 hour exposure to R-134a plus the 24 hour air bake.
10	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-134a plus the 24 hour air bake.
11	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-134a plus the 24 hour air bake.
12	Lead Wires after 500 hour exposure to R-134a plus the 24 hour air bake.

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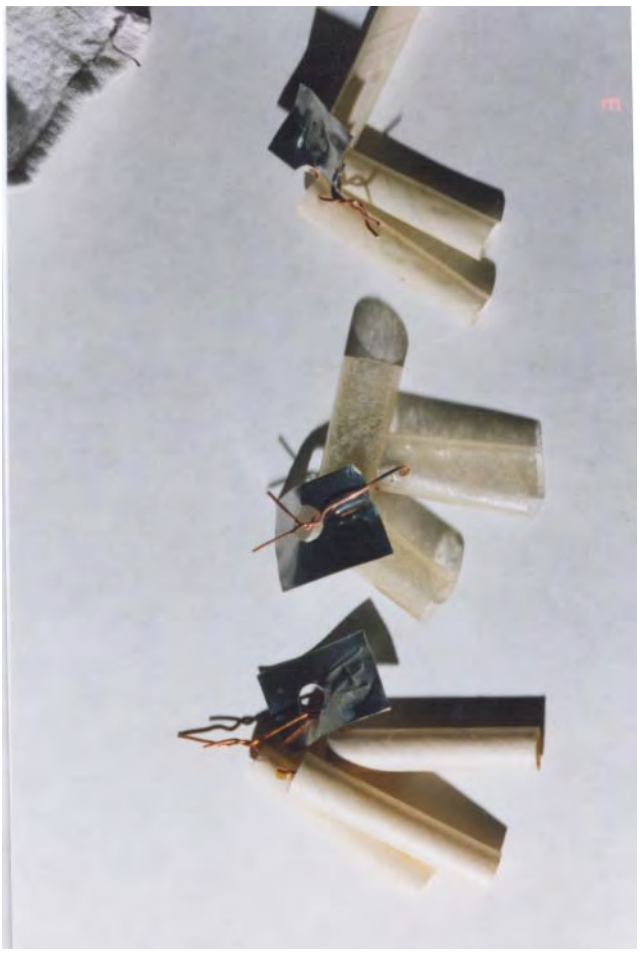

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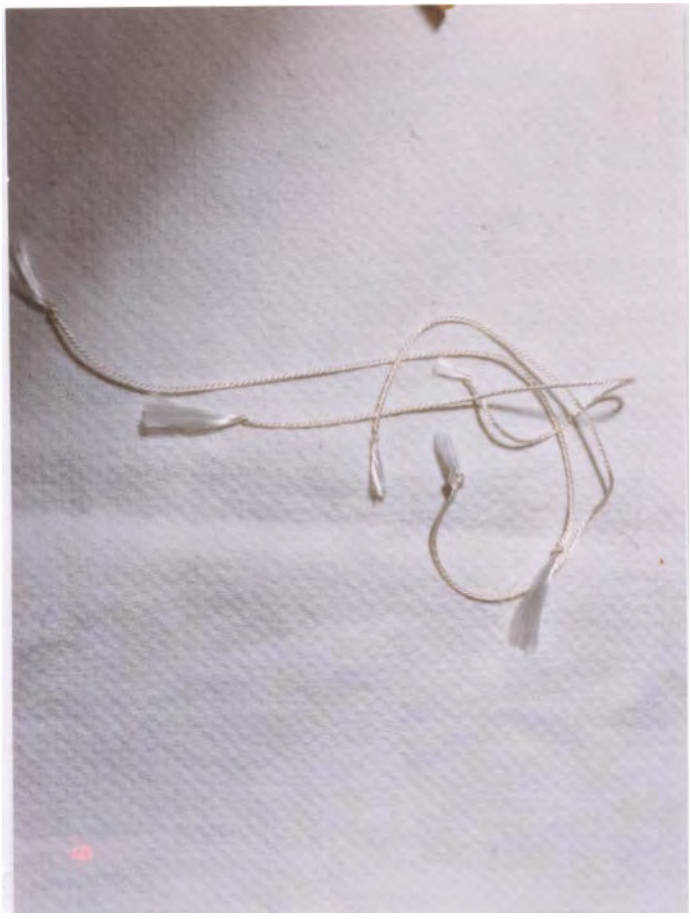

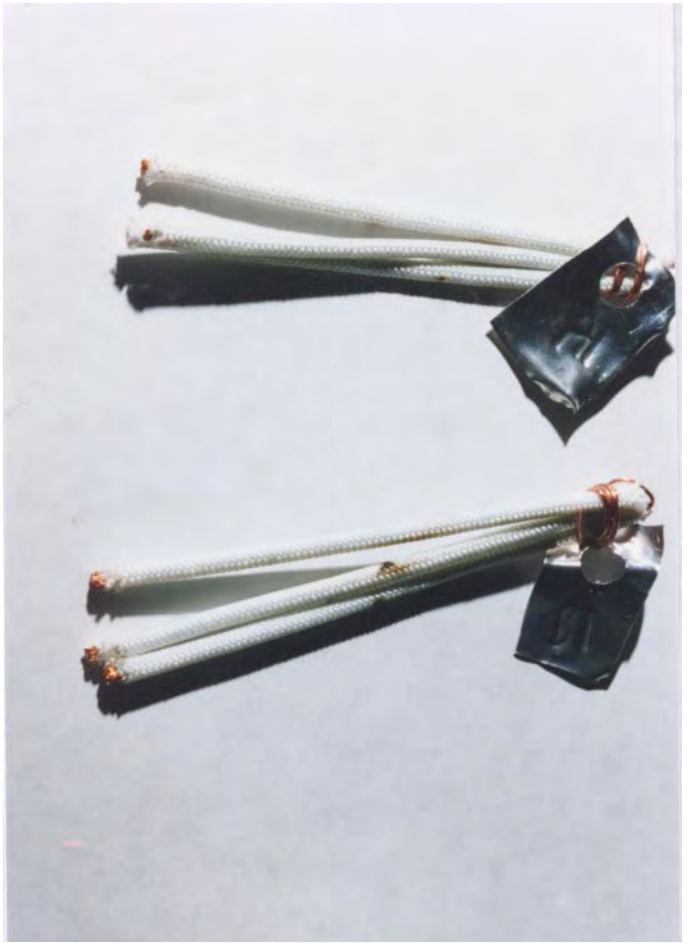

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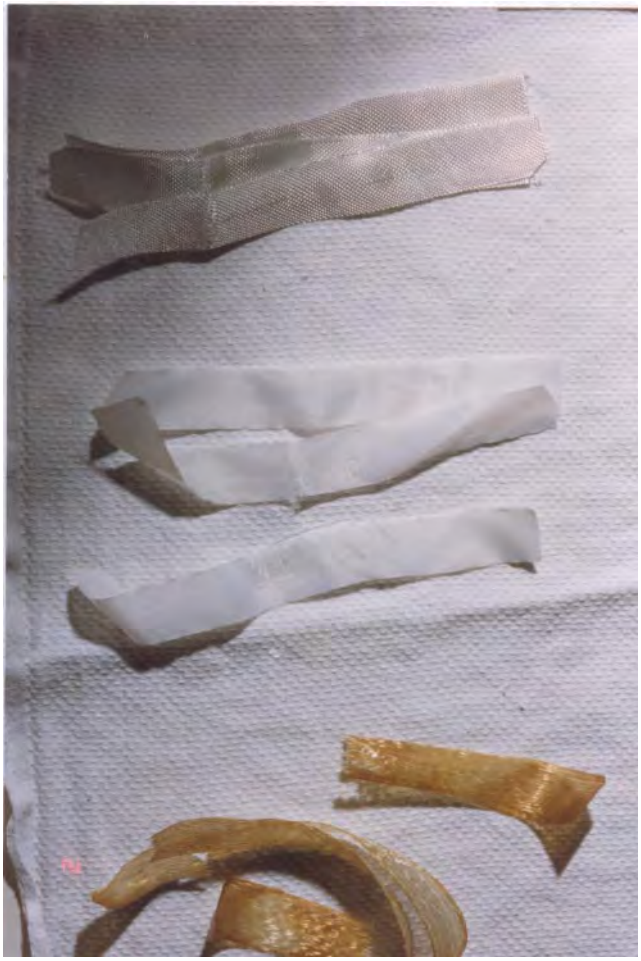

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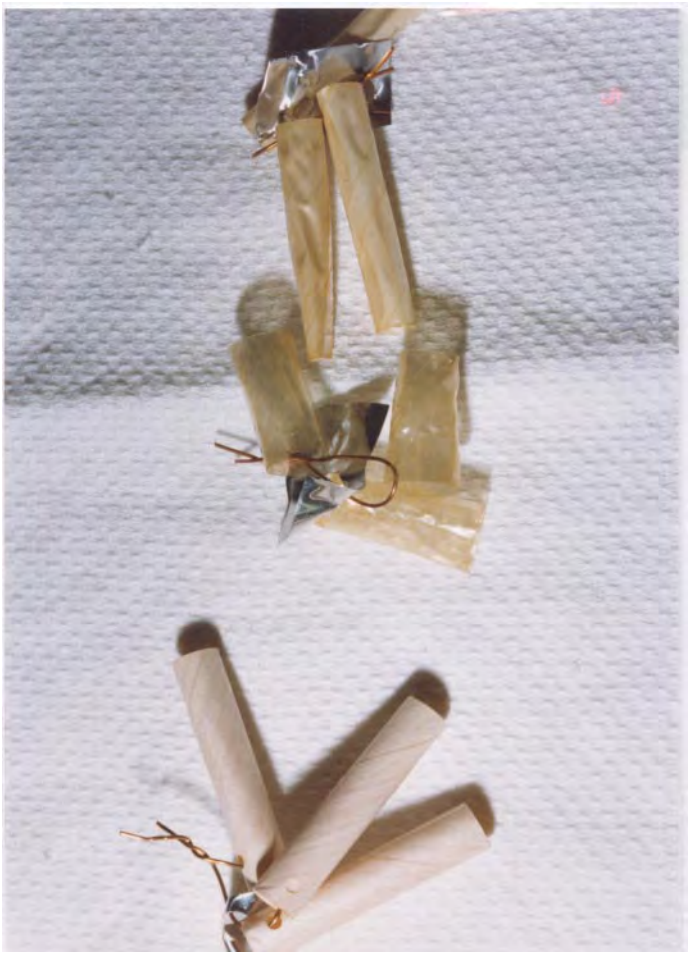
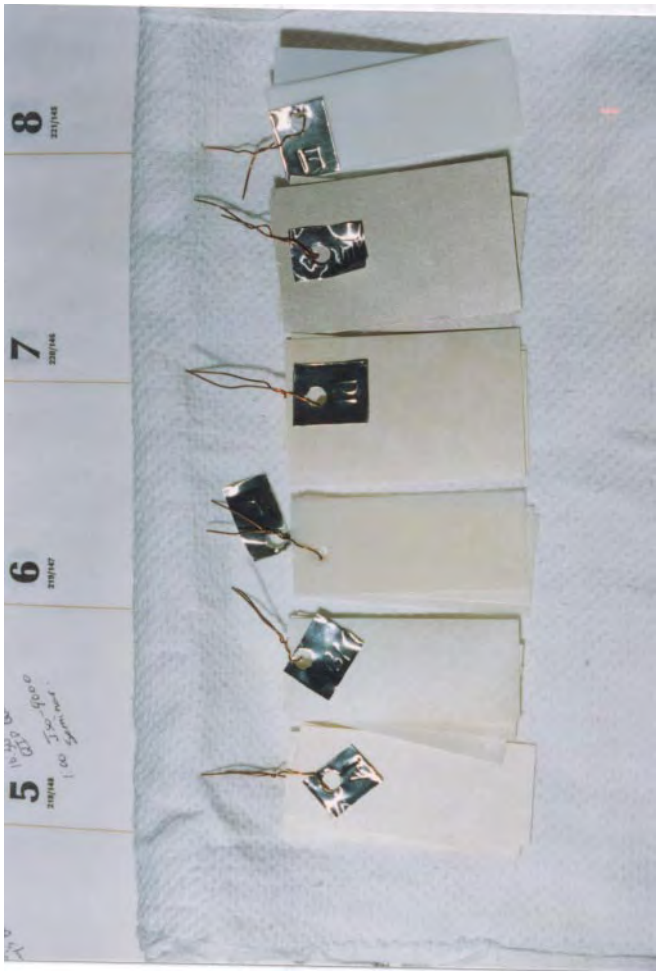


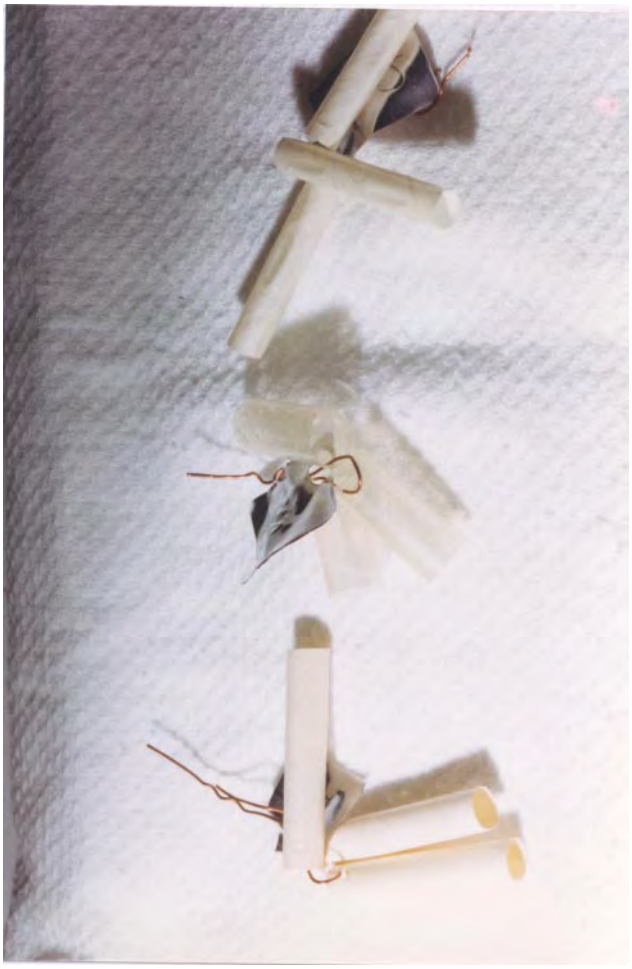
Appendix G

Photographs of Motor Materials after Exposure to HFC-134.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to R-134.
2	Tie cords after 500 hour exposure to R-134.
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-134.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-134.
5	Lead Wires after 500 hour exposure to R-134.
6	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to R-134 plus the 24 hour air bake.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to R-134.
8	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to R-134 plus the 24 hour air bake.
9	Tested Tie cords after 500 hour exposure to R-134 plus the 24 hour air bake.
10	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-134 plus the 24 hour air bake.
11	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-134 plus the 24 hour air bake.
12	Lead Wires after 500 hour exposure to R-134 plus the 24 hour air bake.





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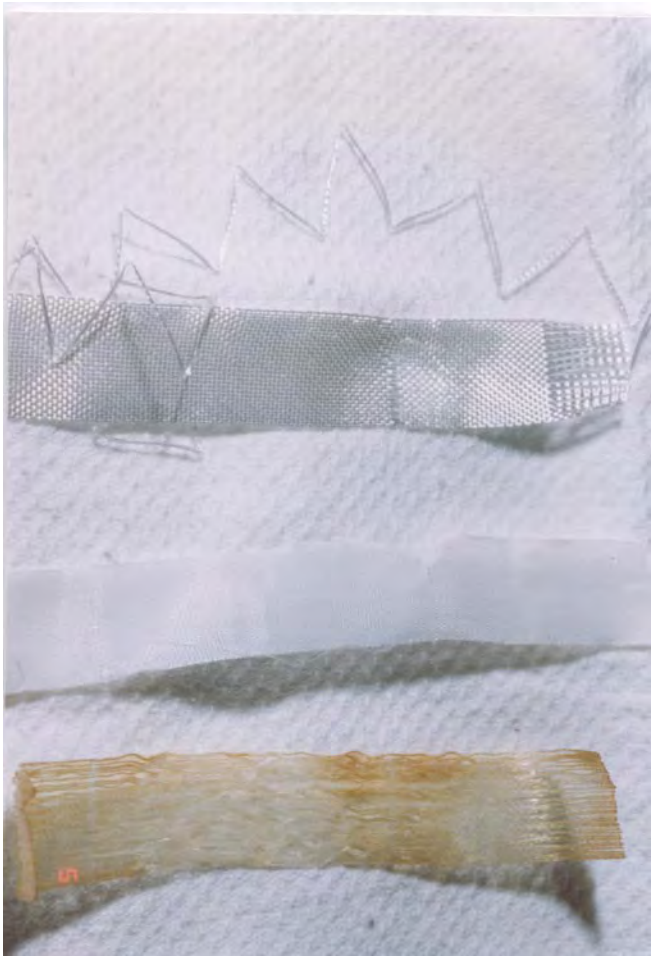
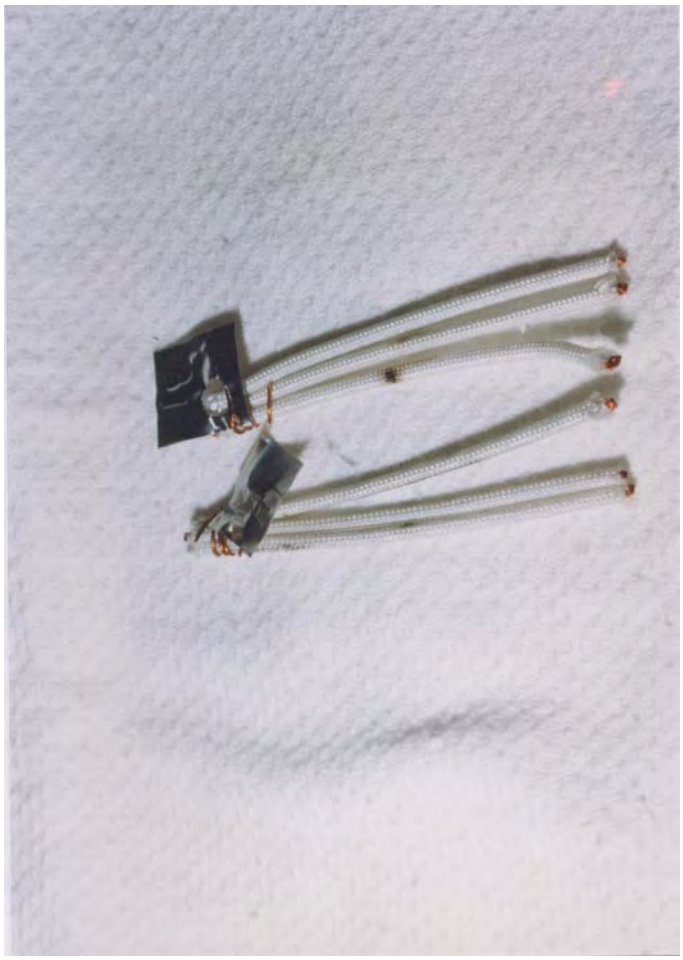
Photograph #4(below)





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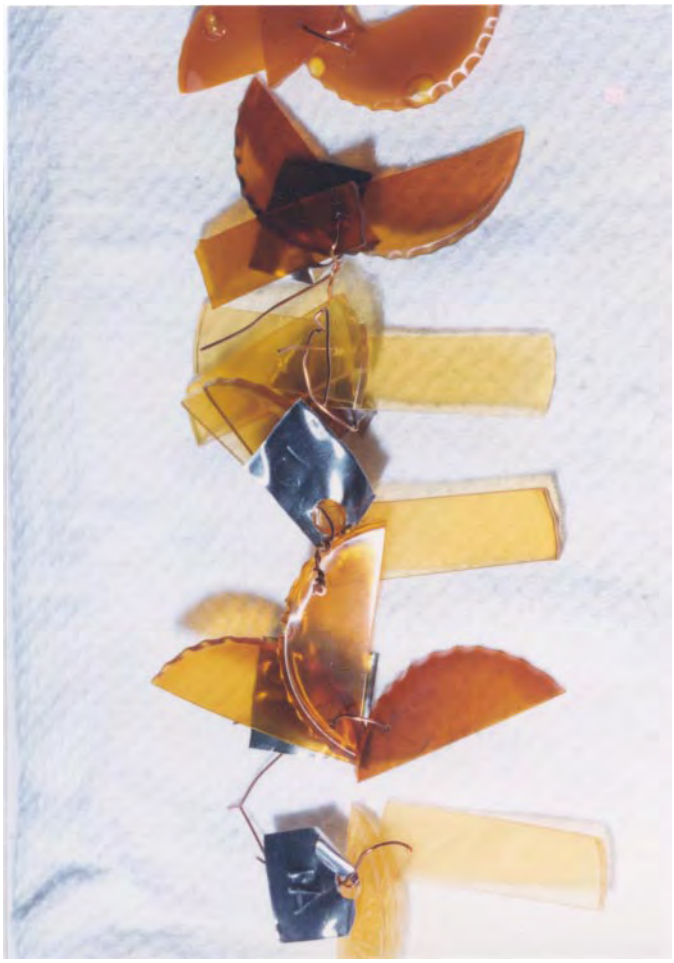

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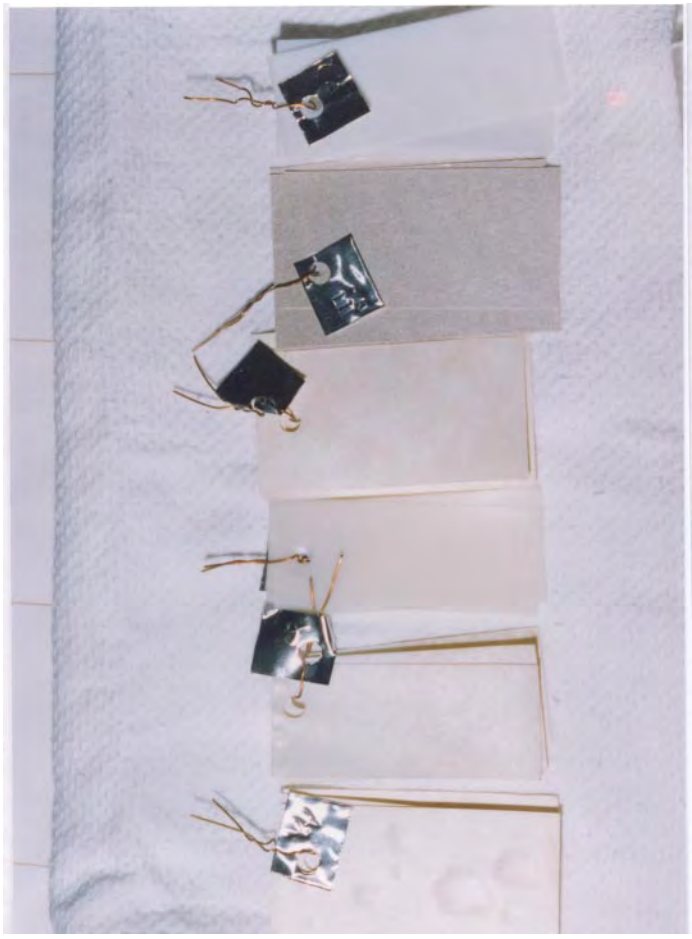

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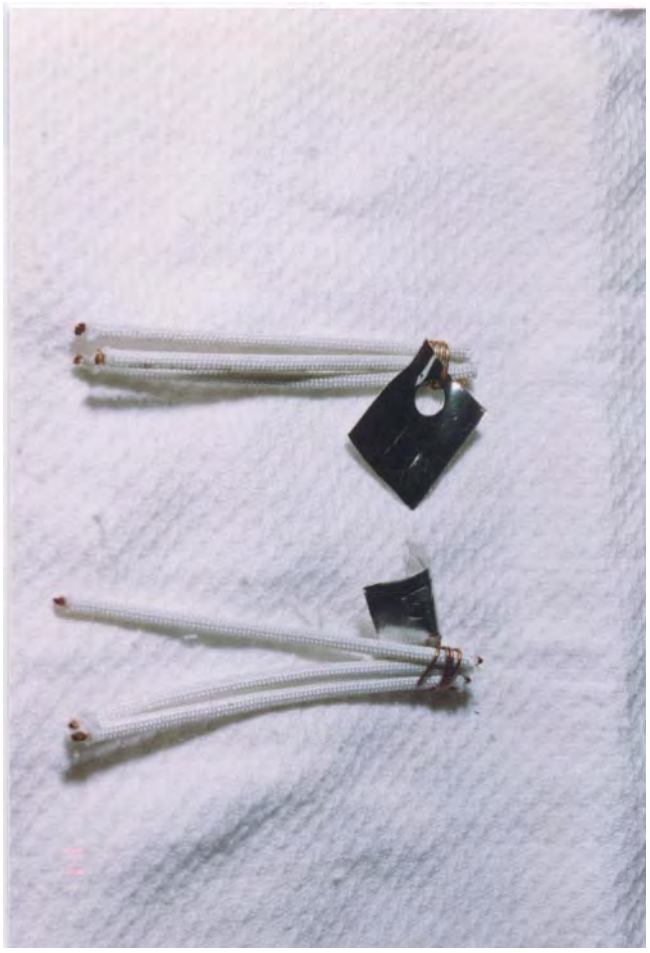
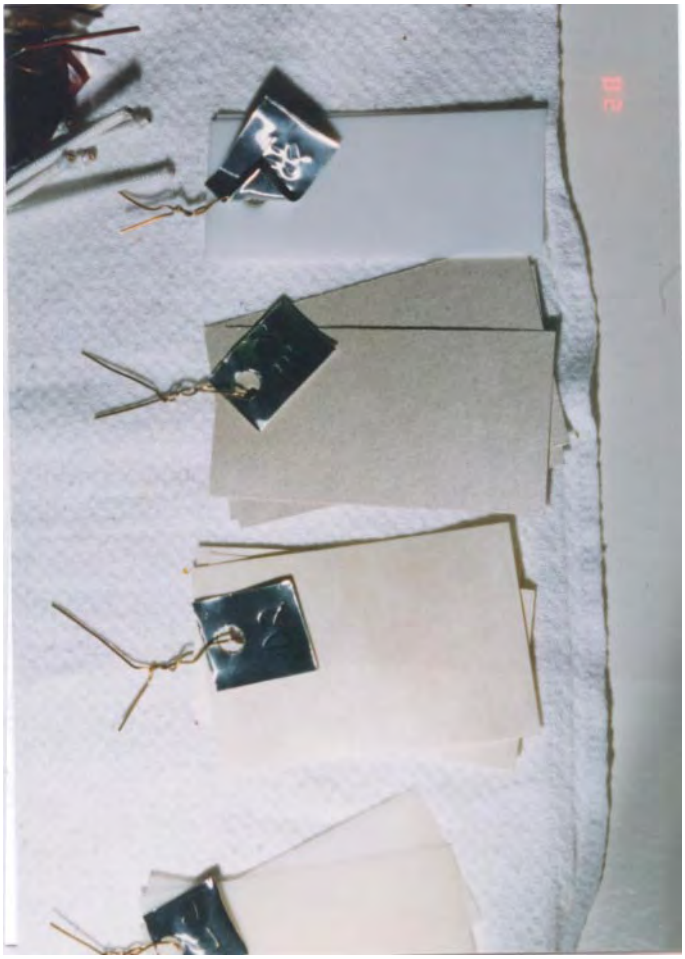


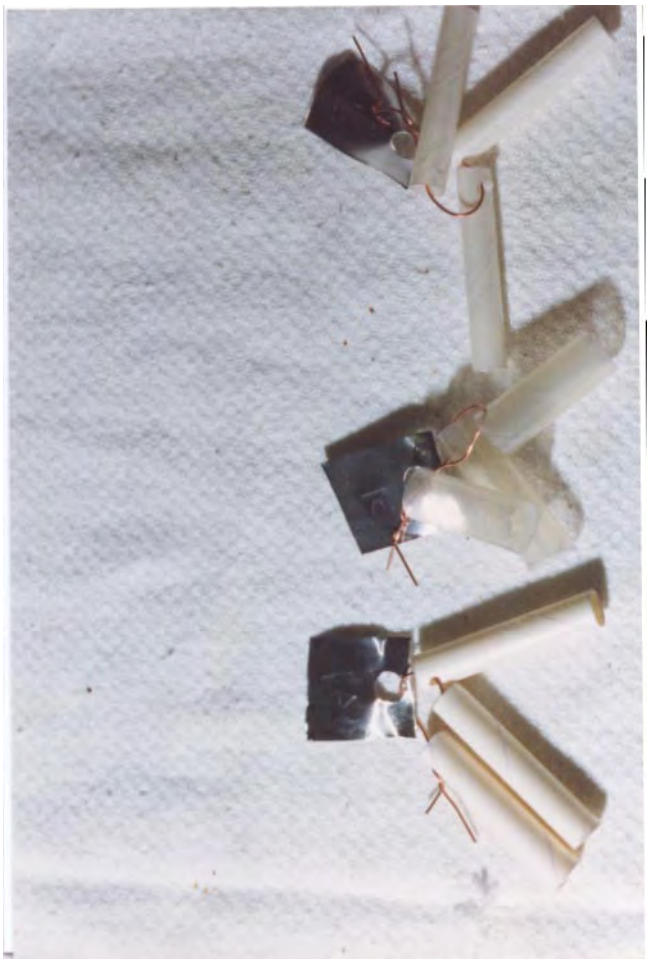
Appendix H

Photographs of Motor Materials after Exposure to HFC-125.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to R-125.
2	Tie cords after 500 hour exposure to R-125.
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-125.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-125.
5	Lead Wires after 500 hour exposure to R-125.
6	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to R-125.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to R-125.
8	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to R-125 plus the 24 hour air bake.
9	Tested Tie cords after 500 hour exposure to R-125 plus the 24 hour air bake.
10	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-125 plus the 24 hour air bake.
11	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-125 plus the 24 hour air bake.
12	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to R-125 plus the 24 hour air bake at 302°F.





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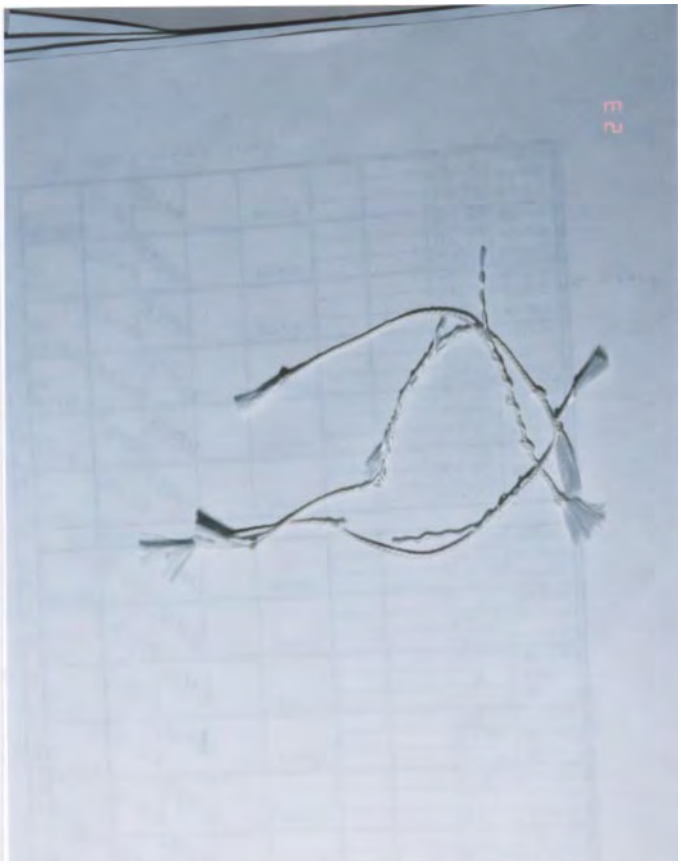
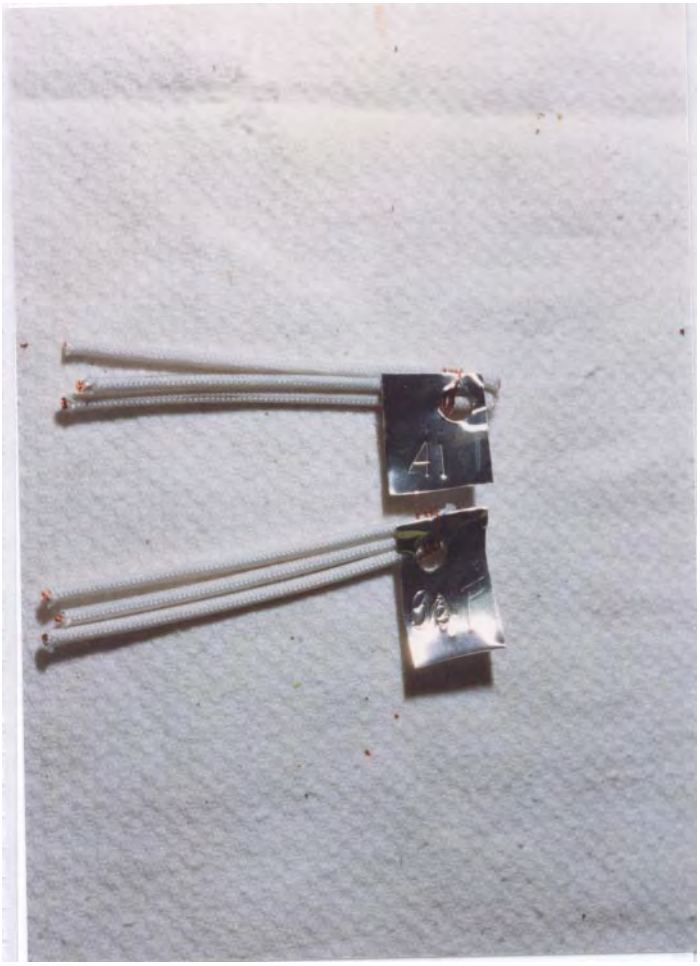
Photograph #4(below)





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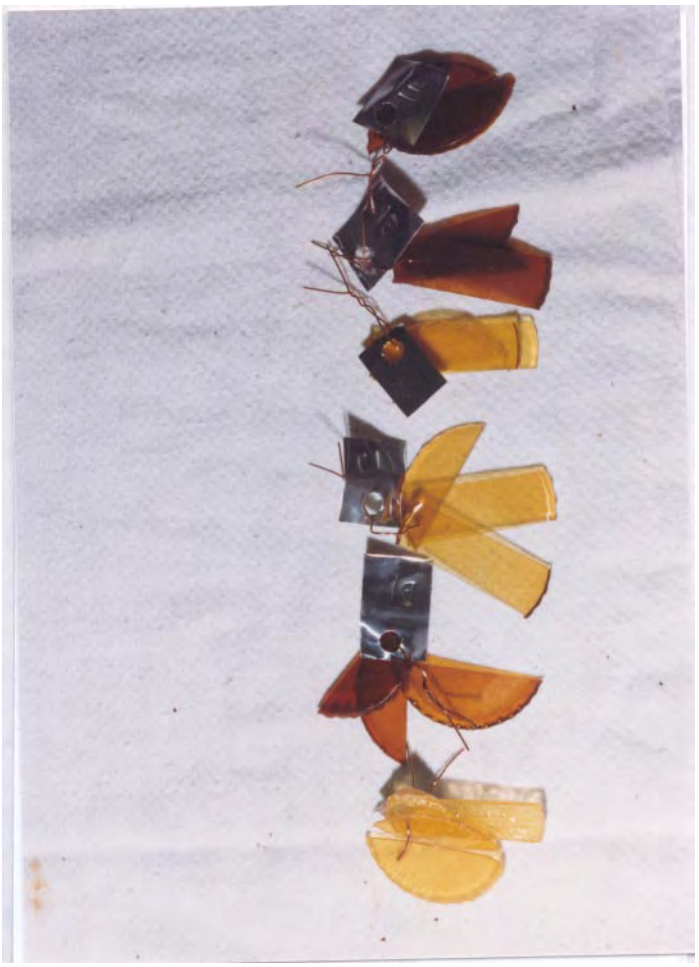

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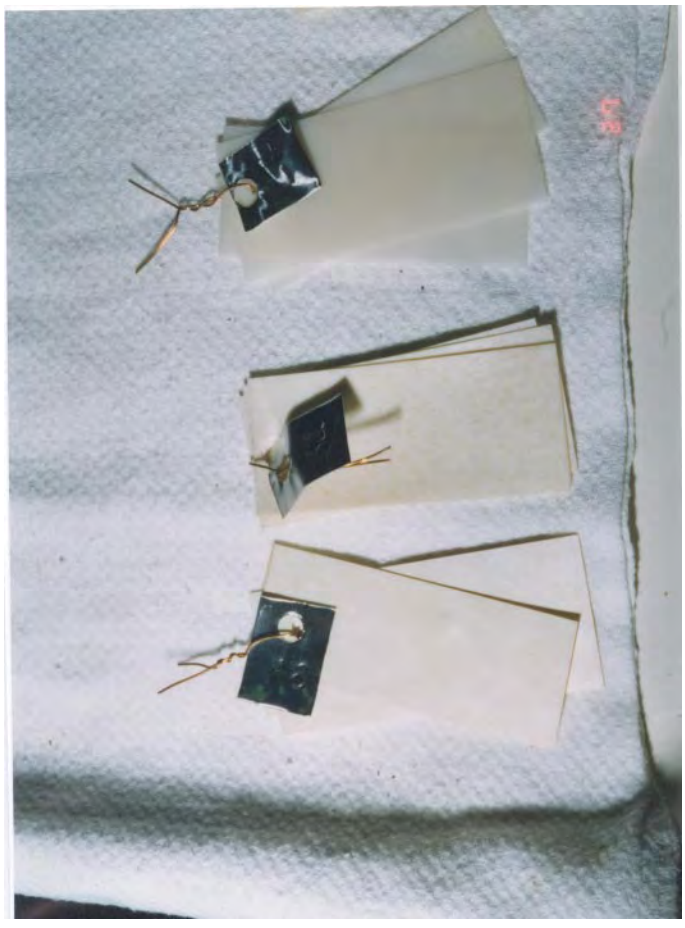
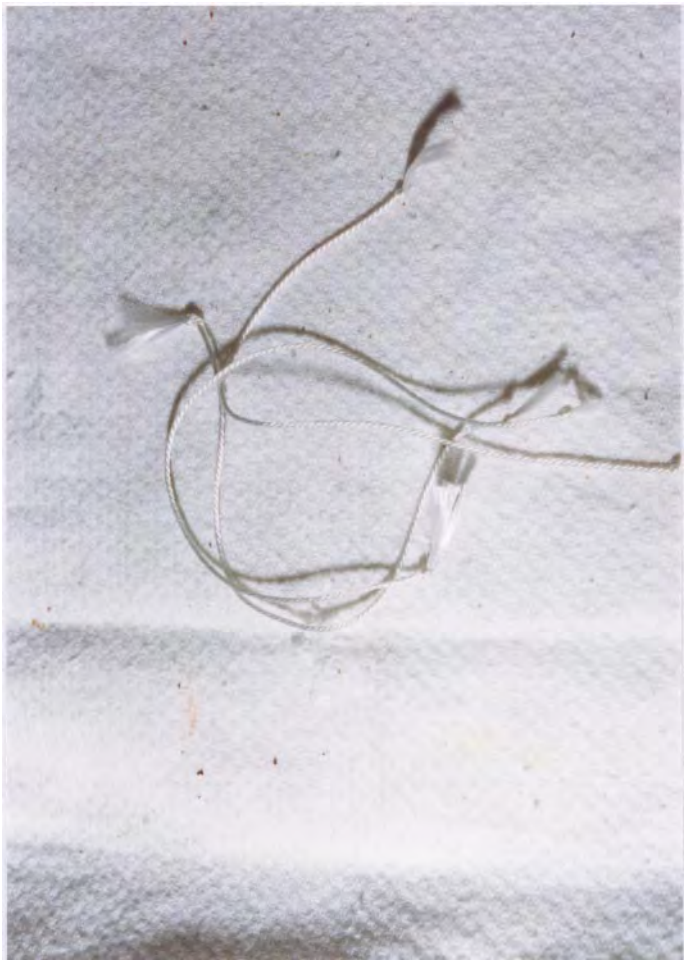
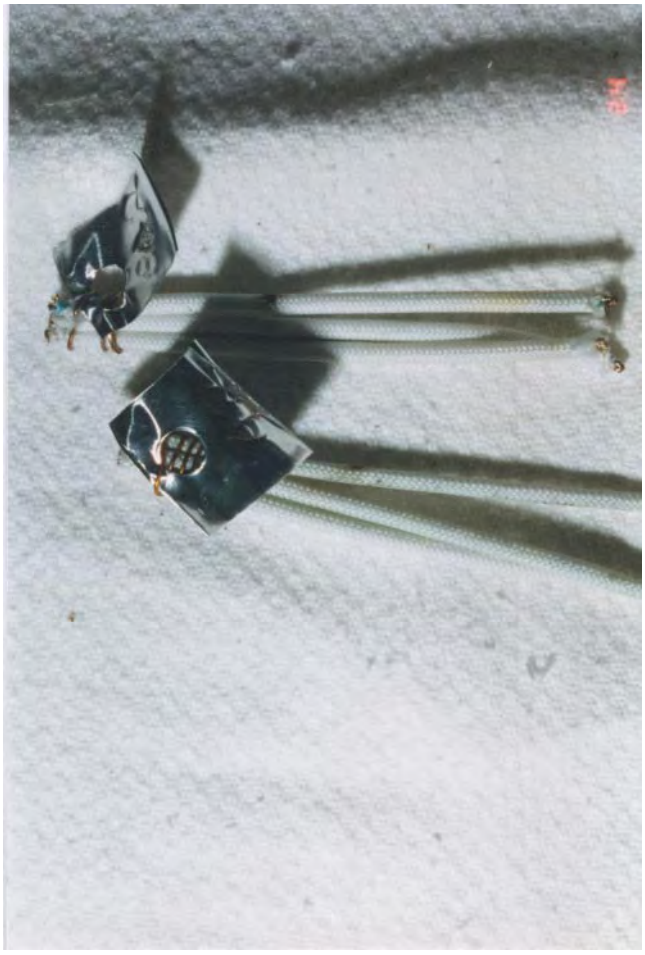






Photograph #9(above)
Photograph #10(below)

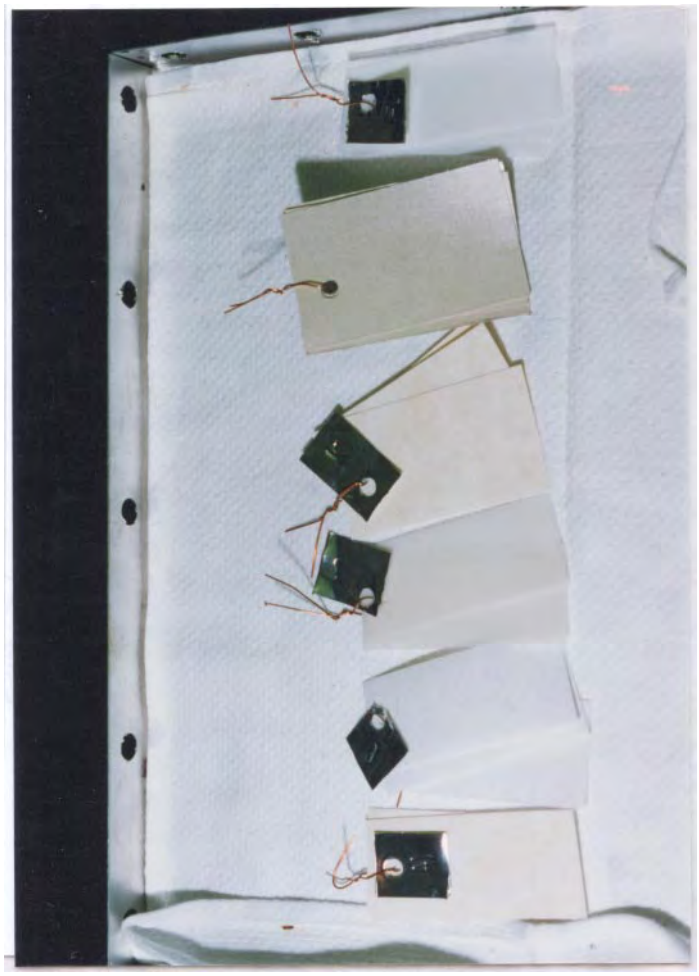
Photograph #11(above)
Photograph #12(below)

Appendix I

Photographs of Motor Materials after Exposure to HFC-32.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to R-32.
2	Tie cords after 500 hour exposure to R-32.
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-32.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-32.
5	Lead Wires after 500 hour exposure to R-32.
6	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to R-32 plus a 24 hour air bake.
7	Varnish Disks(top to bottom-right) Iso-800, 923, Y-833,(top to bottom-left) ER-610, Y-390 and U-475 after 500 hour exposure to R-32.
8	Varnish Disks(top to bottom-right) Iso-800, 923, Y-833,(top to bottom-left)ER-610, Y-390 and U-475 after 500 hour exposure to R-32 plus the 24 hour air bake.
9	Tested Tie cords after 500 hour exposure to R-32 plus the 24 hour air bake.
10	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-32 plus the 24 hour air bake.
11	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-32 plus the 24 hour air bake.
12	Lead Wires after 500 hour exposure to R-32 plus the 24 hour air bake.



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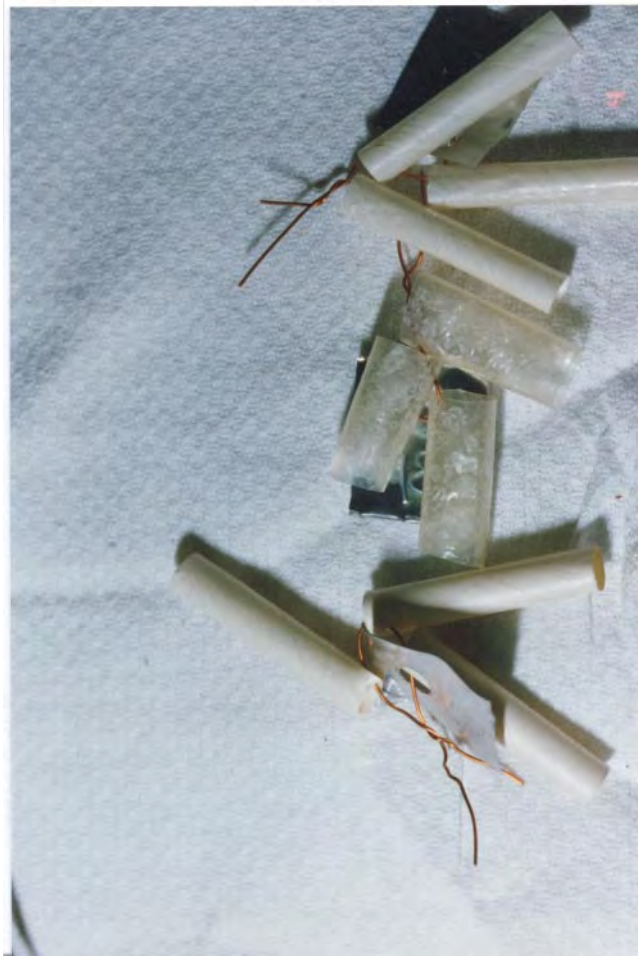

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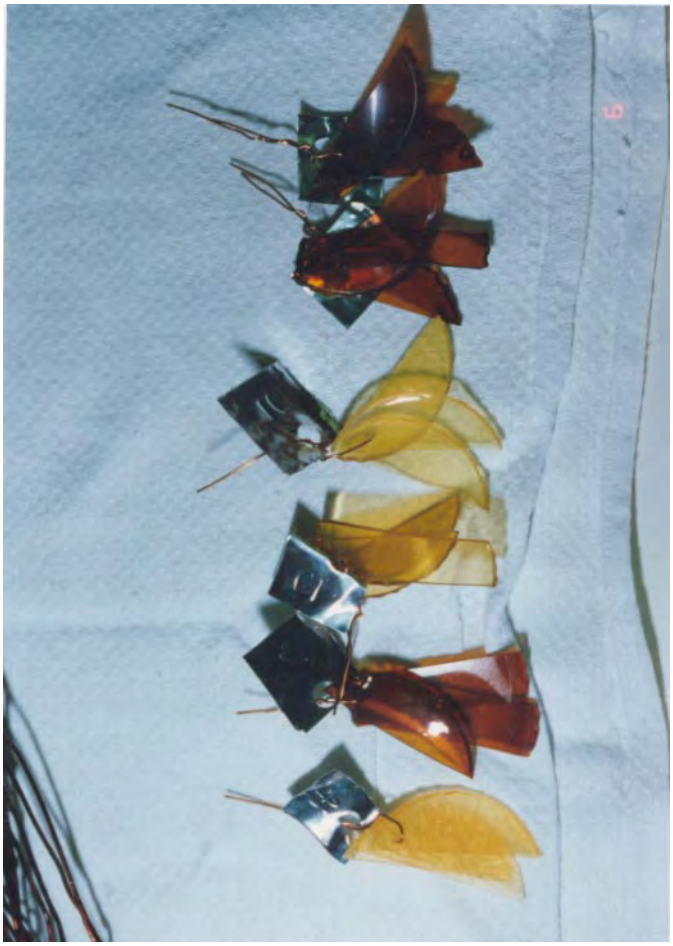

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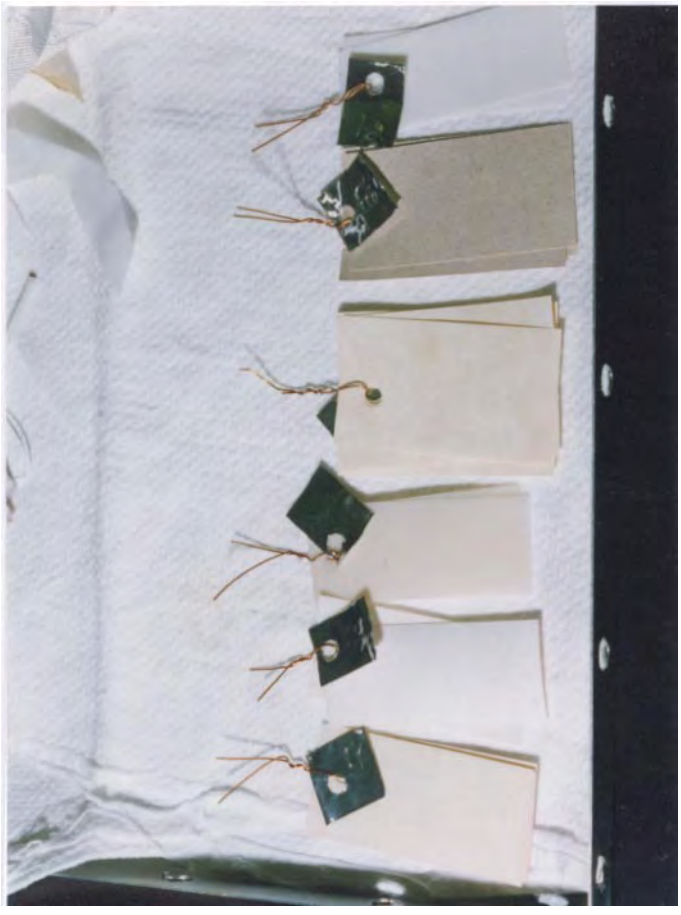
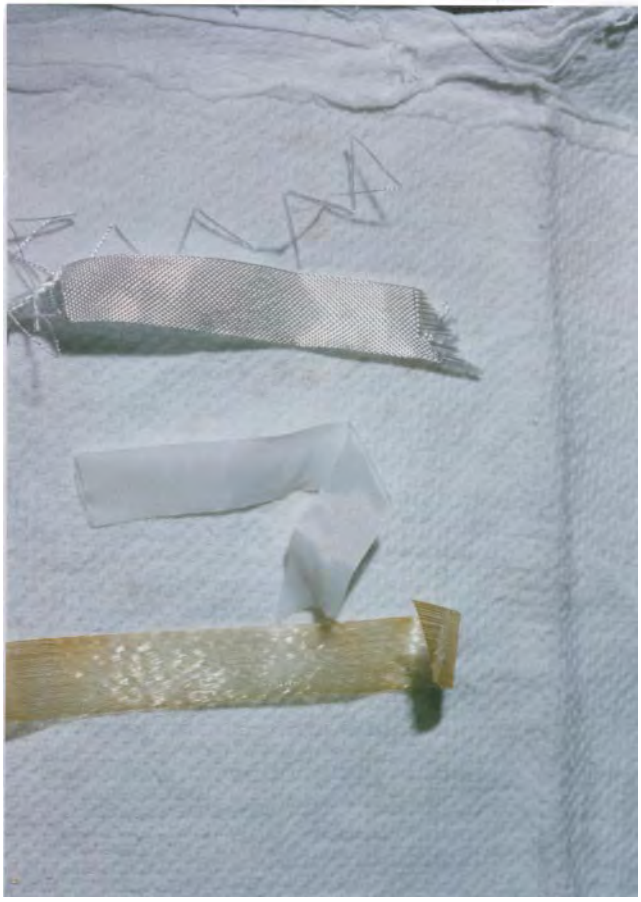
Photograph #8(below)





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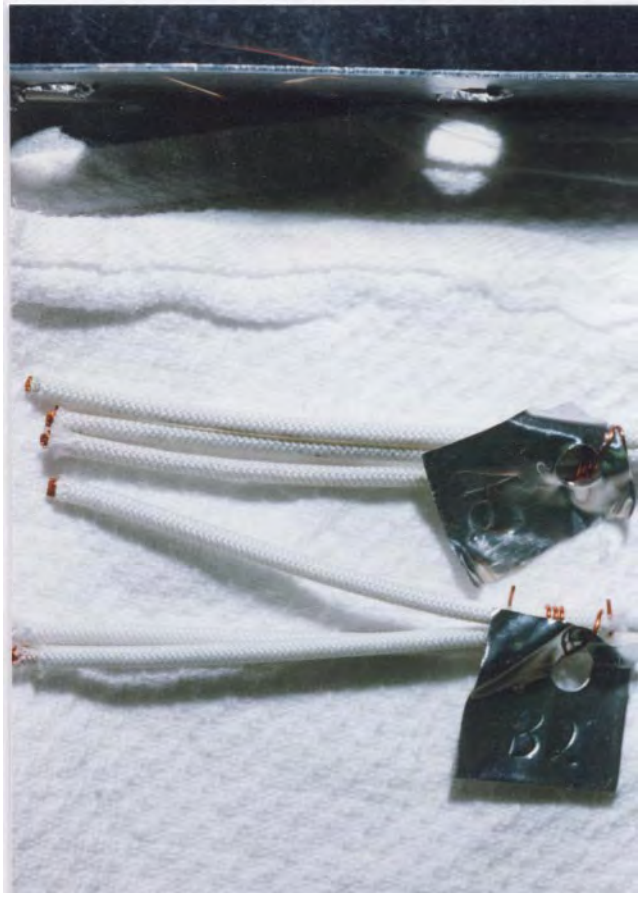
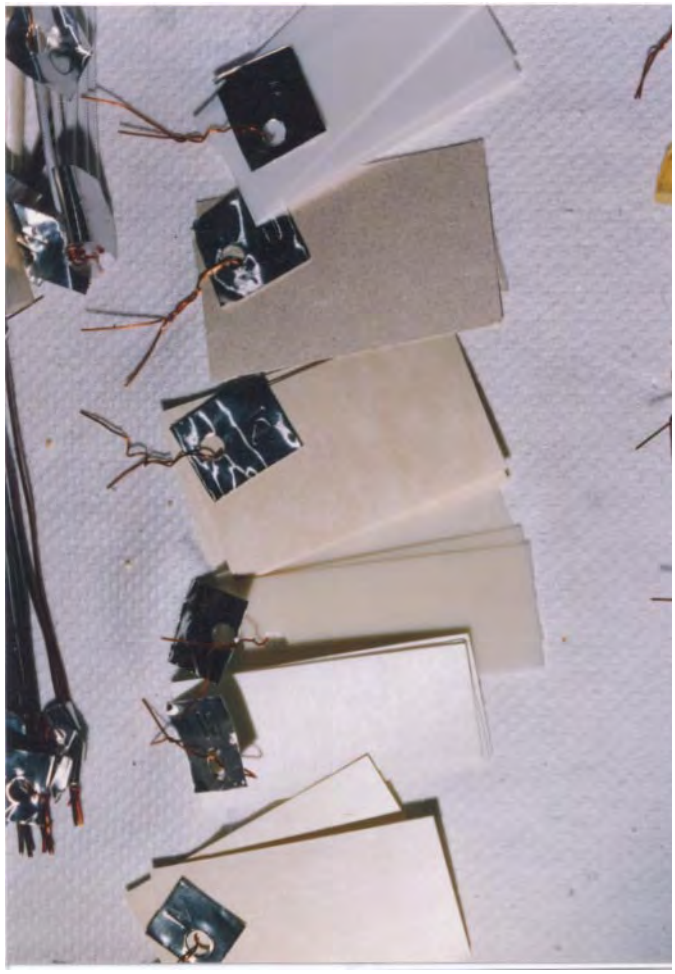


Appendix J

Photographs of Motor Materials after Exposure to HFC-143a.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to R-143a.
2	Tie cords after 500 hour exposure to R-143a.
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-143a.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-143a.
5	Lead Wires after 500 hour exposure to R-143a.
6	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to R-143a plus a 24 hour air bake.
7	Varnish Disks(top to bottom-right) Iso-800, 923, Y-833,(top to bottom-left) ER-610, Y-390 and U-475 after 500 hour exposure to R-143a.
8	Varnish Disks(top to bottom-right) Iso-800, 923, Y-833,(top to bottom-left) ER-610, Y-390 and U-475 after 500 hour exposure to R-143a plus the 24 hour air bake.
9	Tested Tie cords after 500 hour exposure to R-143a plus the 24 hour air bake.
10	Sleeving(top to bottom) Nomex/Mylar, Nomex and Mylar after 500 hour exposure to R-143a plus the 24 hour air bake.
11	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-143a plus the 24 hour air bake.
12	Lead Wires after 500 hour exposure to R-143a plus the 24 hour air bake.



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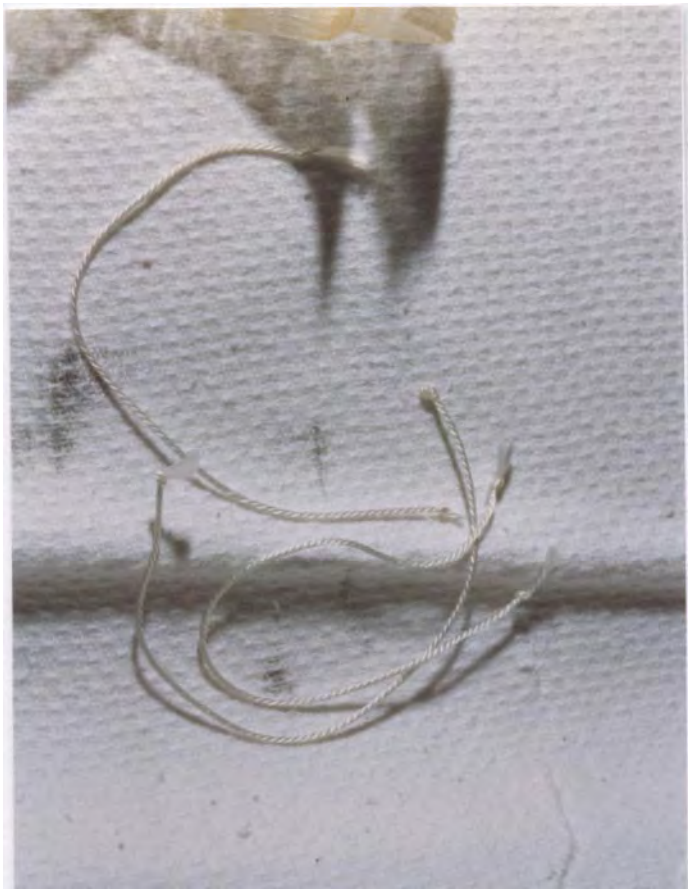
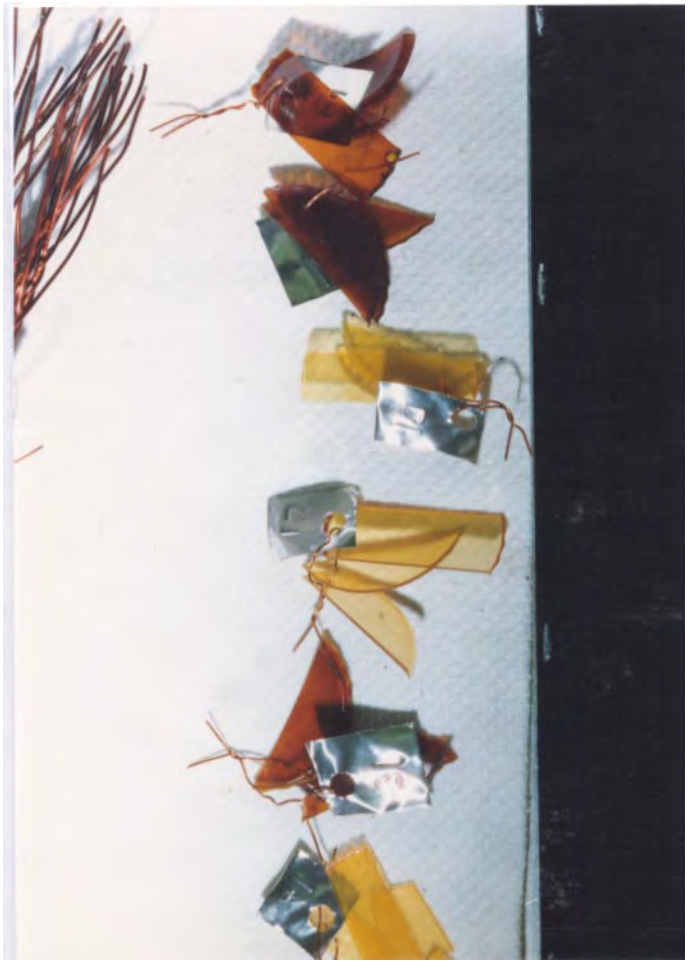
Photograph #4(below)





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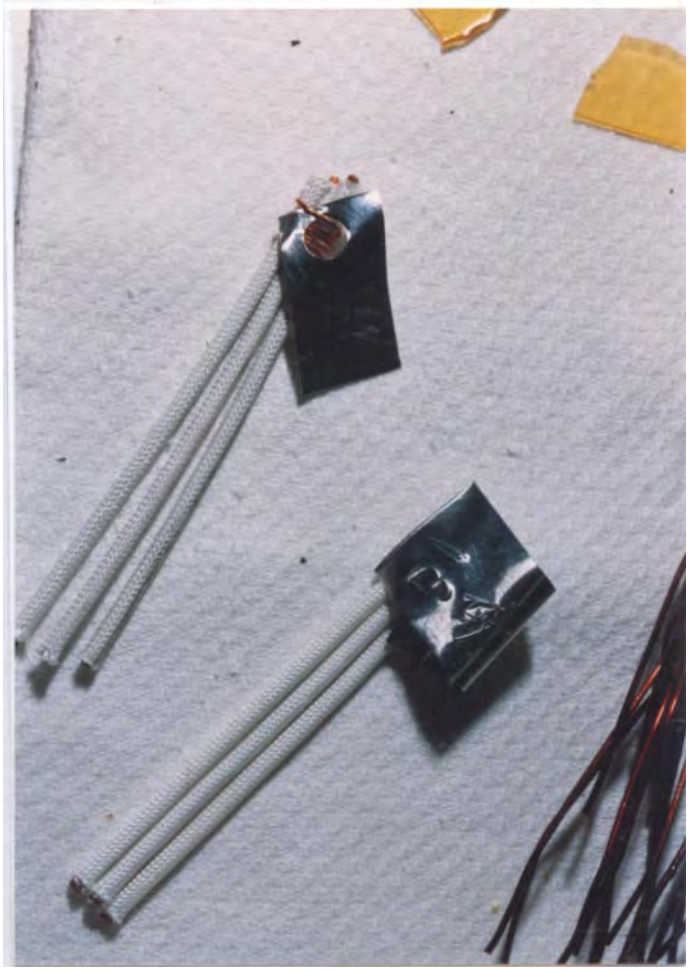

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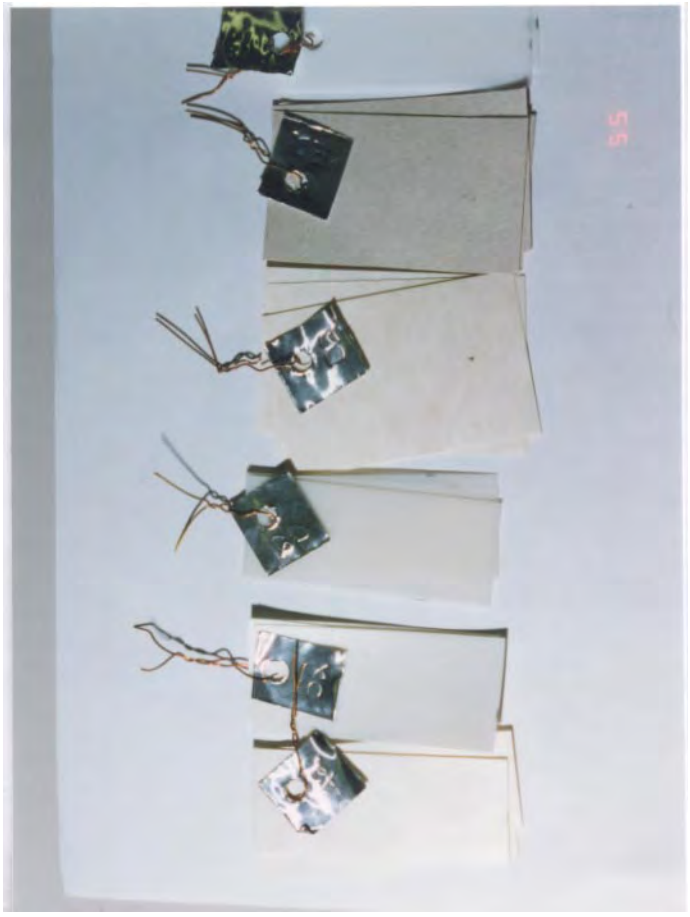


Photograph #9(above)
Photograph #10(below)

Photograph #11(above)
Photograph #12(below)

Appendix K

Photographs of Motor Materials after Exposure to HFC-245ca.

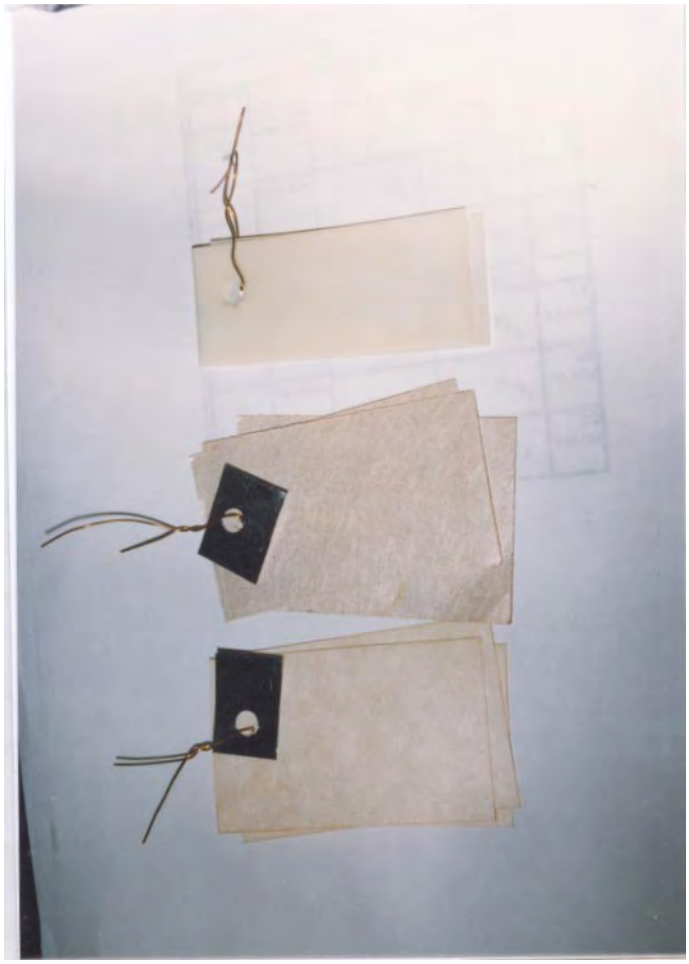
Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to R-245ca
2	Tie cords after 500 hour exposure to R-245ca.
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to R-245ca.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-245ca.
5	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to R-245ca.
6	Sheet Insulation(top to bottom), Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to R-245ca plus a 24 hour air bake.
7	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to R-245ca plus a 24 hour air bake.
8	Tie cords after 500 hour exposure to R-245ca plus the 24 hour air bake.
9	Sleeving(top to bottom) Nomex/Mylar, Nomex and Mylar after 500 hour exposure to R-245ca plus the 24 hour air bake.
10	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to R-245ca plus the 24 hour air bake.

Photograph #1(above)
Photograph #2(below)

Photograph #3(above)
Photograph #4(below)

Photograph #5(above)
Photograph #6(below)



Photograph #7(above)
Photograph #8(below)

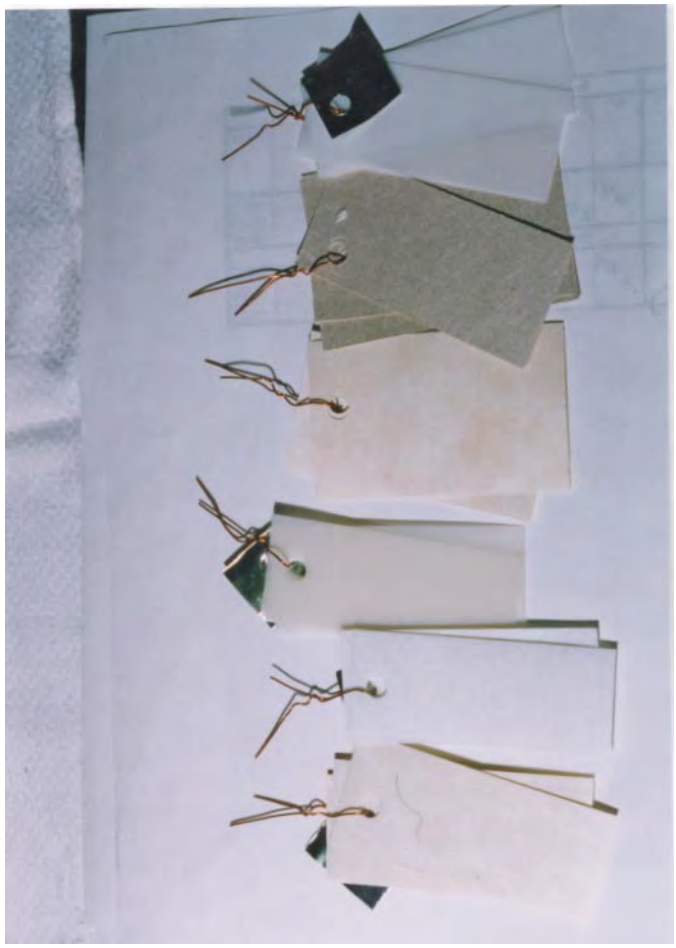
Photograph #9(above)
Photograph #10(below)

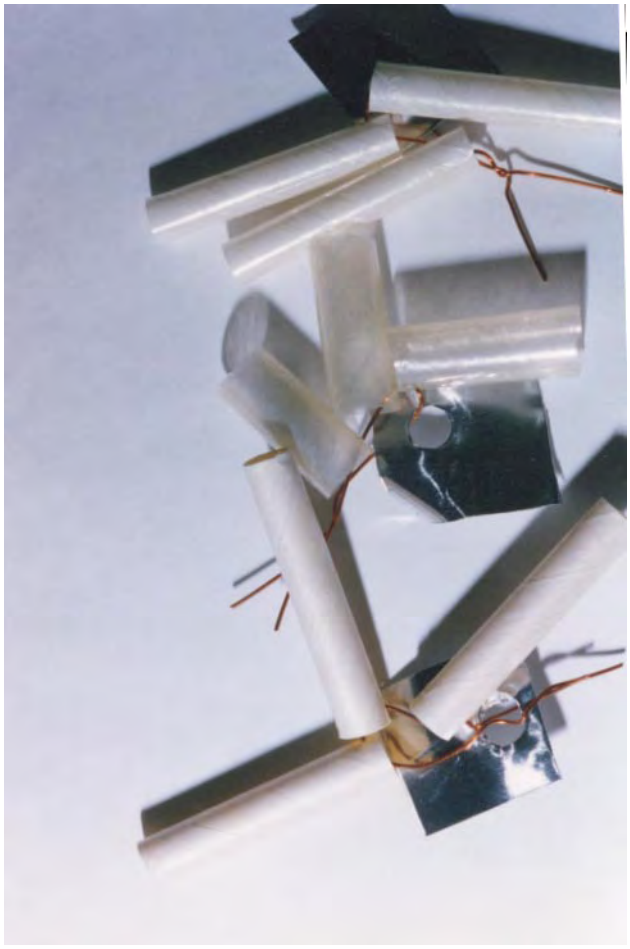
Appendix L

Photographs of Motor Materials after Exposure to Nitrogen @ 140°F(60°C).

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to Nitrogen.
2	Tie cords after 500 hour exposure to Nitrogen.
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to Nitrogen.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to Nitrogen.
5	Lead Wires after 500 hour exposure to Nitrogen.
6	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to Nitrogen a plus a 24 hour air bake.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to Nitrogen.
8	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to Nitrogen plus the 24 hour air bake.
9	Tie cords after 500 hour exposure to Nitrogen plus the 24 hour air bake.
10	Sleeving(top to bottom) Nomex/Mylar, Nomex and Mylar after 500 hour exposure to Nitrogen plus the 24 hour air bake.
11	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to Nitrogen plus the 24 hour air bake.
12	Lead Wires after 500 hour exposure to Nitrogen plus the 24 hour air bake.





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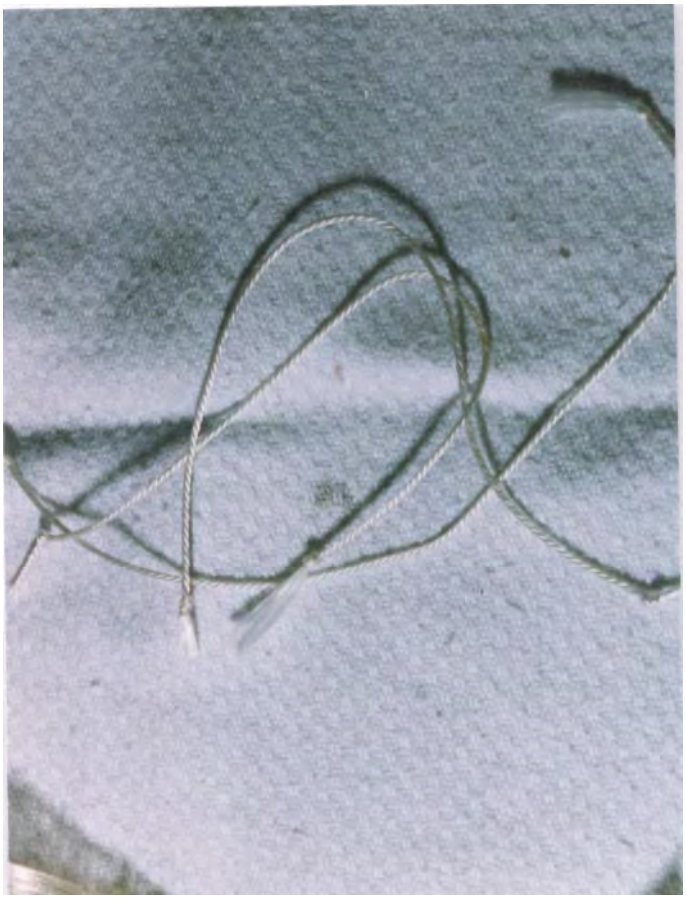
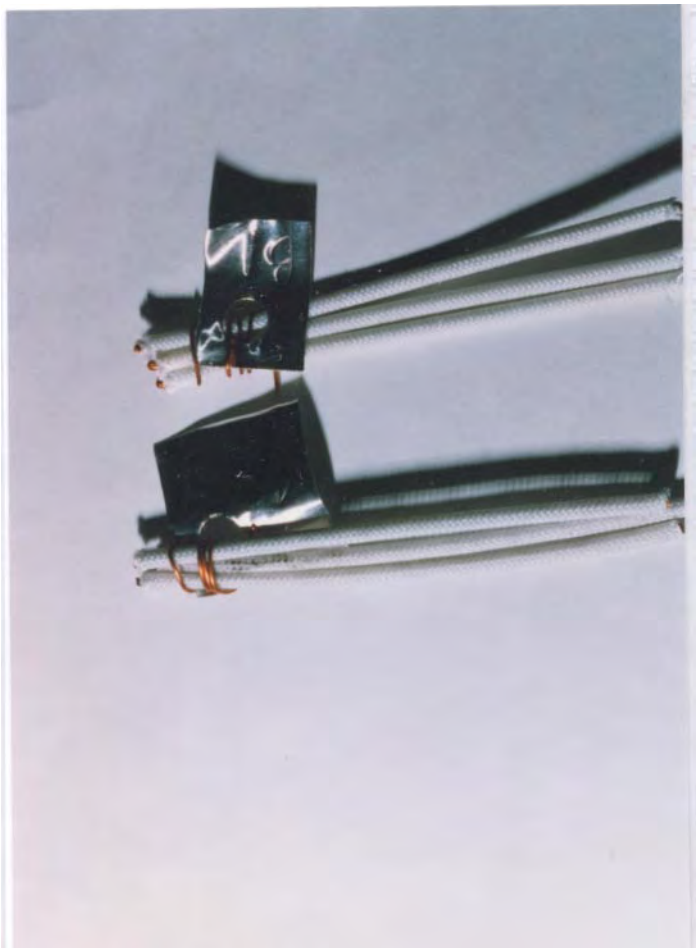
Photograph #4(below)





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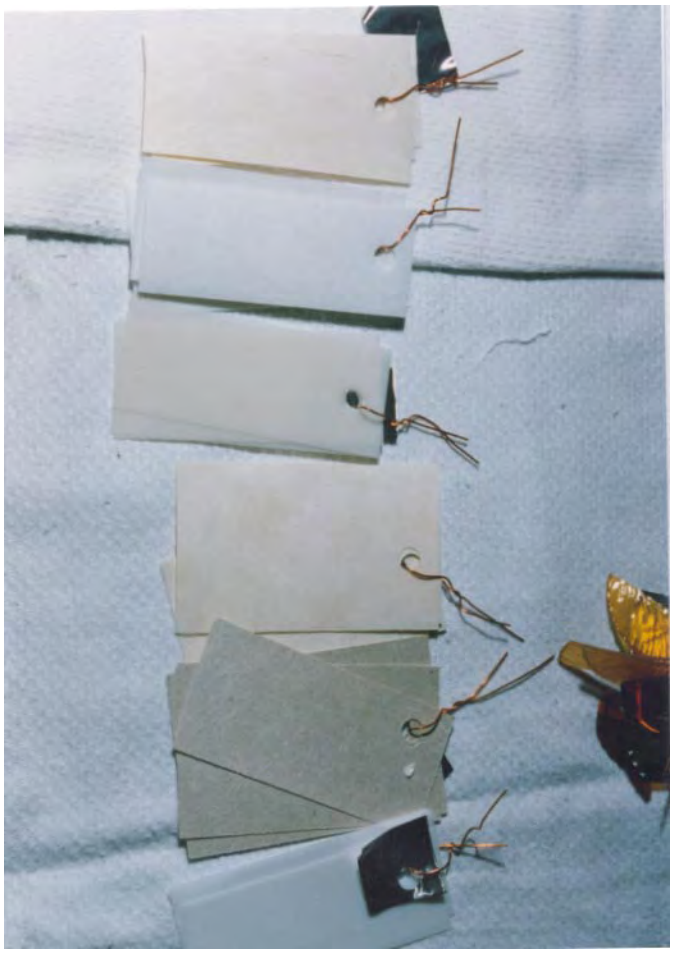
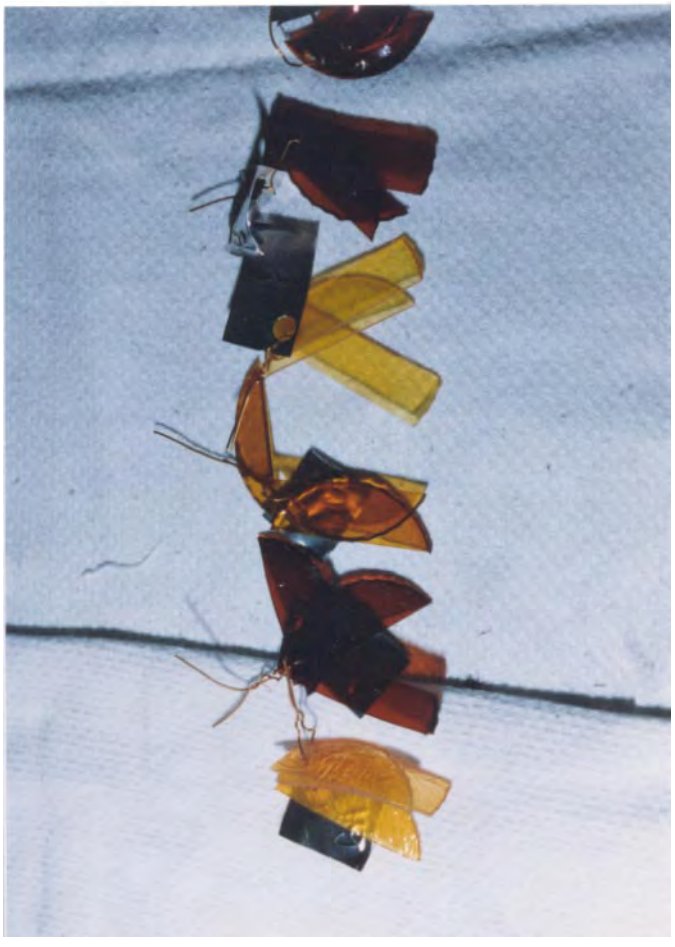
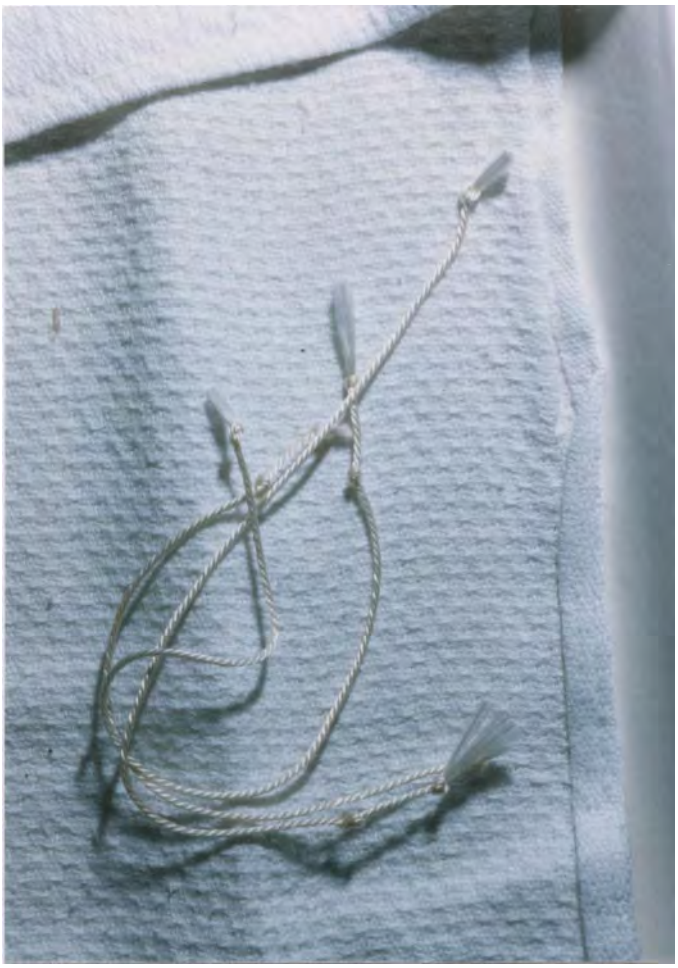
Photograph #6(below)

Photograph #7(above)
Photograph #8(below)

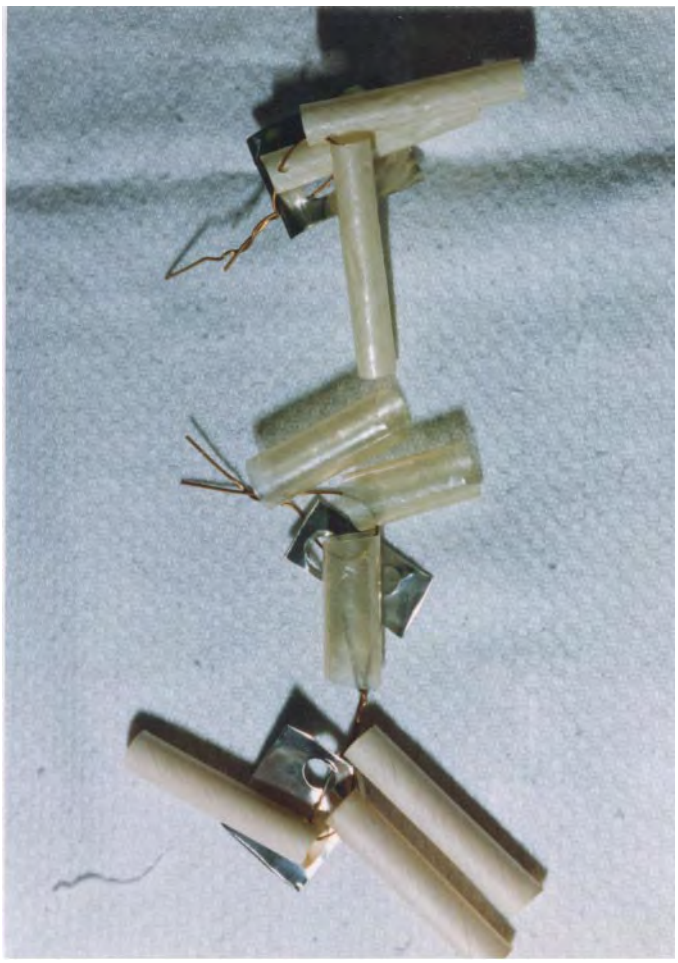


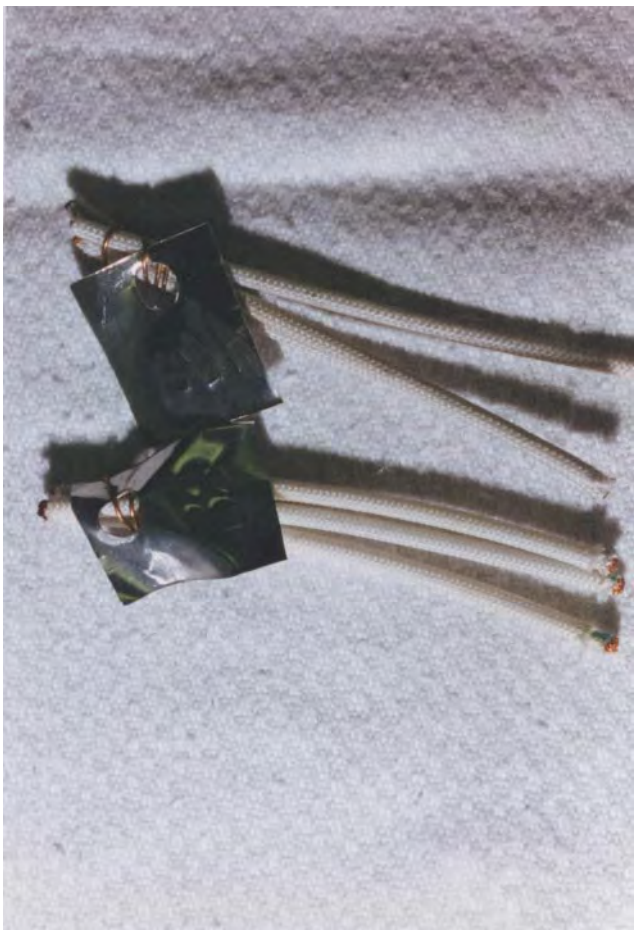




Photograph #9(above)
Photograph #10(below)

Photograph #11(above)
Photograph #12(below)



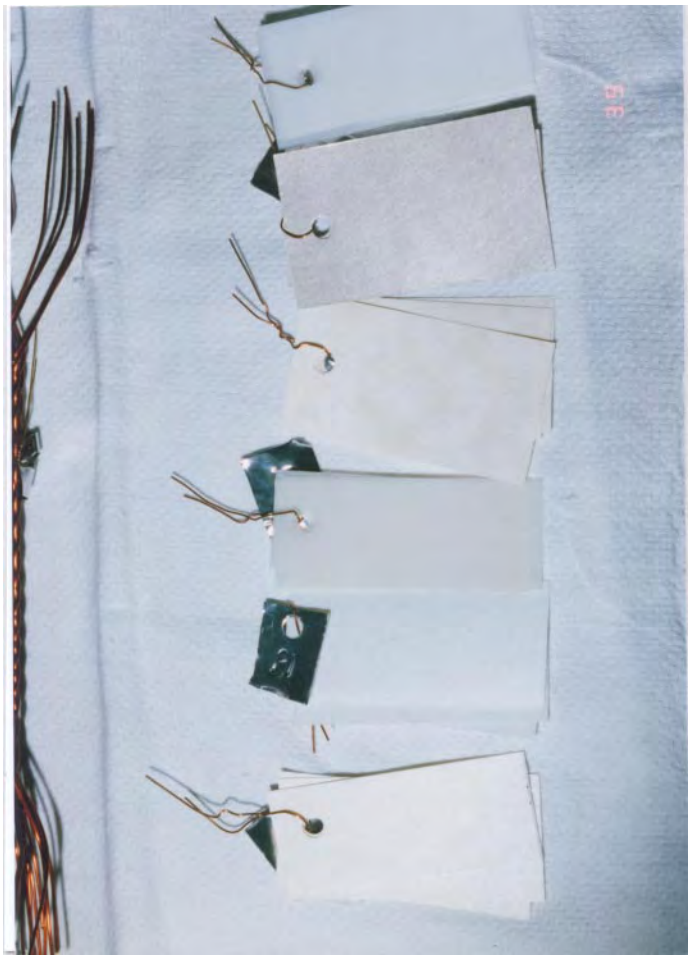


Appendix M

Photographs of Motor Materials after Exposure to Nitrogen @ 194°F(90°C).

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to Nitrogen.
2	Tie cords after 500 hour exposure to Nitrogen.
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to Nitrogen.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to Nitrogen.
5	Lead Wires after 500 hour exposure to Nitrogen.
6	Sheet Insulation(top to bottom) Melinex, Nomex-Mica, Nomex, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to Nitrogen plus a 24 hour air bake.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to Nitrogen.
8	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to Nitrogen plus the 24 hour air bake.
9	Tie cords after 500 hour exposure to Nitrogen plus the 24 hour air bake.
10	Sleeving(top to bottom) Nomex/Mylar, Nomex and Mylar after 500 hour exposure to Nitrogen plus the 24 hour air bake.
11	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to Nitrogen plus the 24 hour air bake.
12	Lead Wires after 500 hour exposure to Nitrogen plus the 24 hour air bake.



Photograph #1(above)
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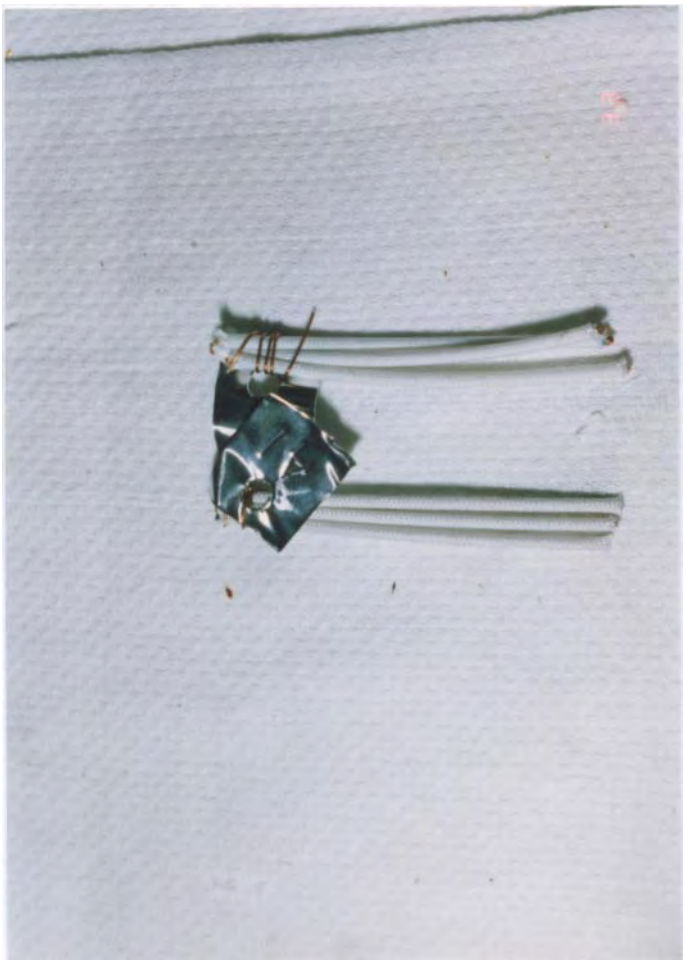
Photograph #3(above)
Photograph #4(below)



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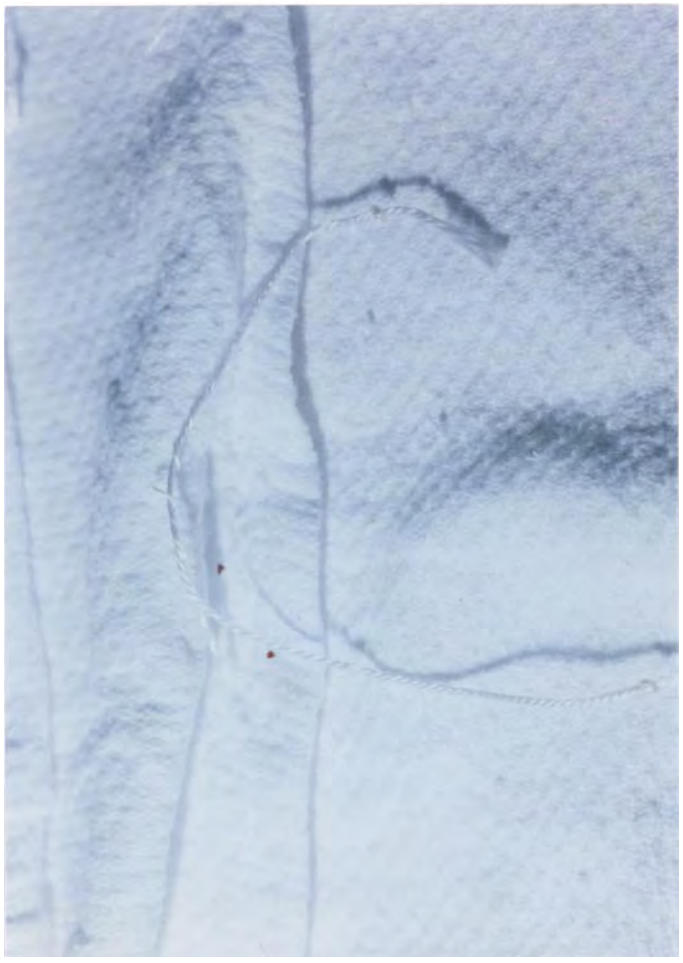

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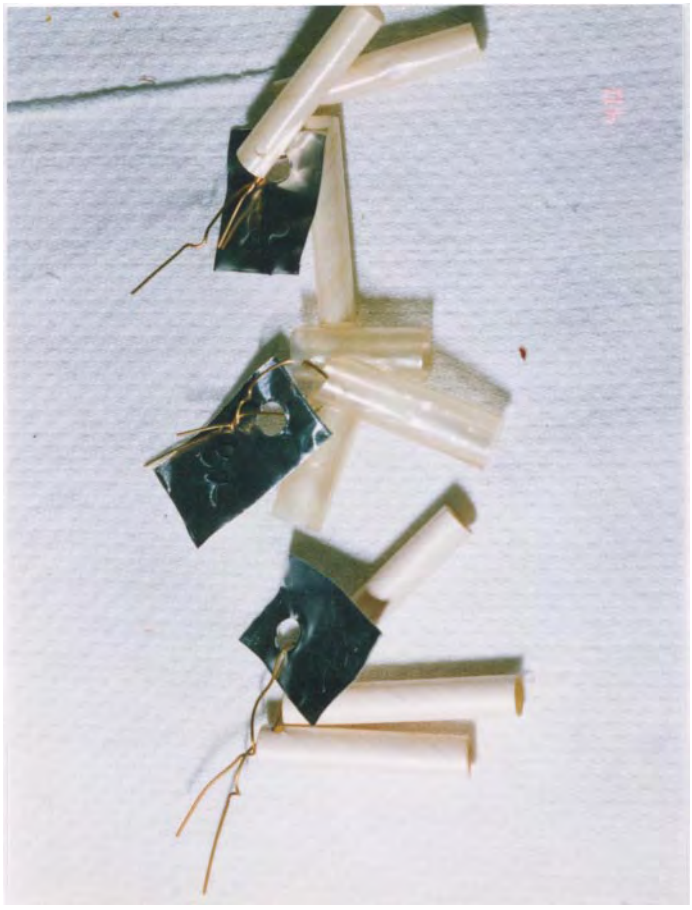
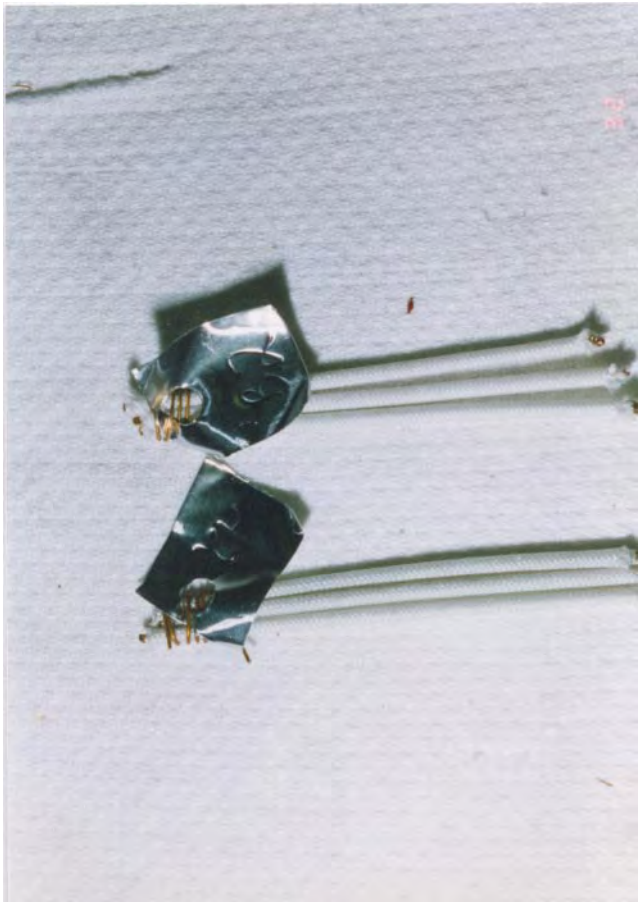


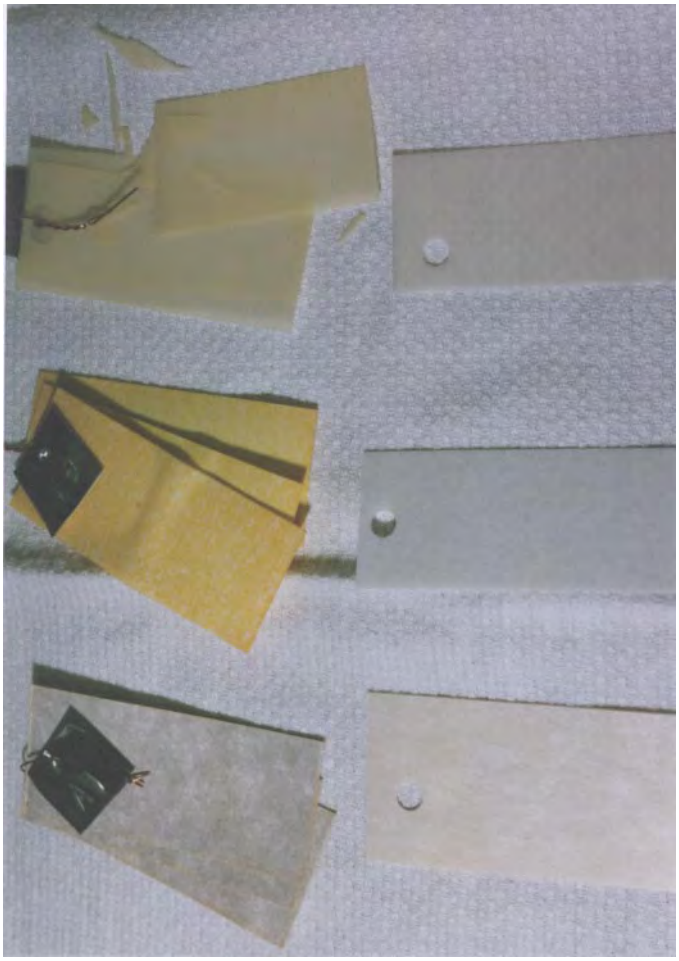


Appendix N

Photographs of Motor Materials after Exposure to Nitrogen @ 260°F(127°C).

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom-Right)Melinex, Nomex-Mica, Nomex,(top to bottom-left) Mylar, Dacron/Mylar/Dacron and Nomex/Mylar/Nomex after 500 hour exposure to Nitrogen.
2	Tie cords after 500 hour exposure to Nitrogen
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to Nitrogen.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to Nitrogen.
5	Lead Wires after 500 hour exposure to Nitrogen.
6	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to Nitrogen plus a 24 hour air bake.
7	Varnish Disks(top to bottom-right) Iso-800, 923, Y-833,(top to bottom-left) ER-610, Y-390 and U-475 after 500 hour exposure to Nitrogen.



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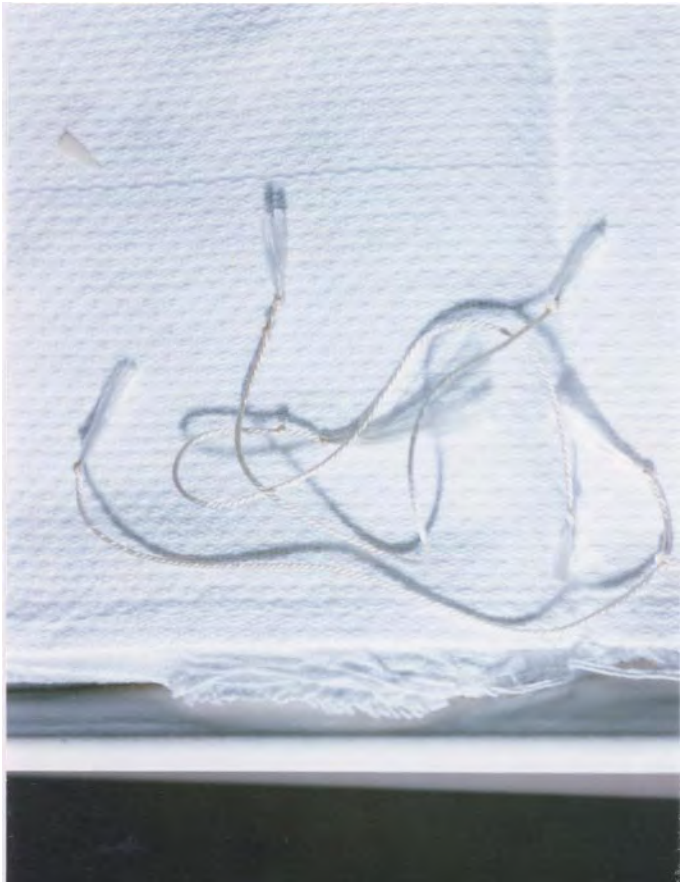
Photograph #3(above)
Photograph #4(below)



Photograph #5(above)
Photograph #6(below)

Photograph #7(above)

Appendix O

Photographs of Motor Materials after Exposure to HCFC-22/Witco Suniso 3GS.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, and Nomex after 500 hour exposure to refrigerant-lubricant plus a 24 hour air bake.
6	Sheet Insulation(top to bottom) Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
7	Varnish Disks(top to bottom-right) Iso-800, 923, Y-833,(top to bottom-left) ER-610, Y-390 and U-475 after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom-right) Iso-800, 923, Y-833,(top to bottom-left) ER-610, Y-390 and U-475 after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
9	Tie cords after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
10	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
11	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
12	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.

Photograph #1(above)
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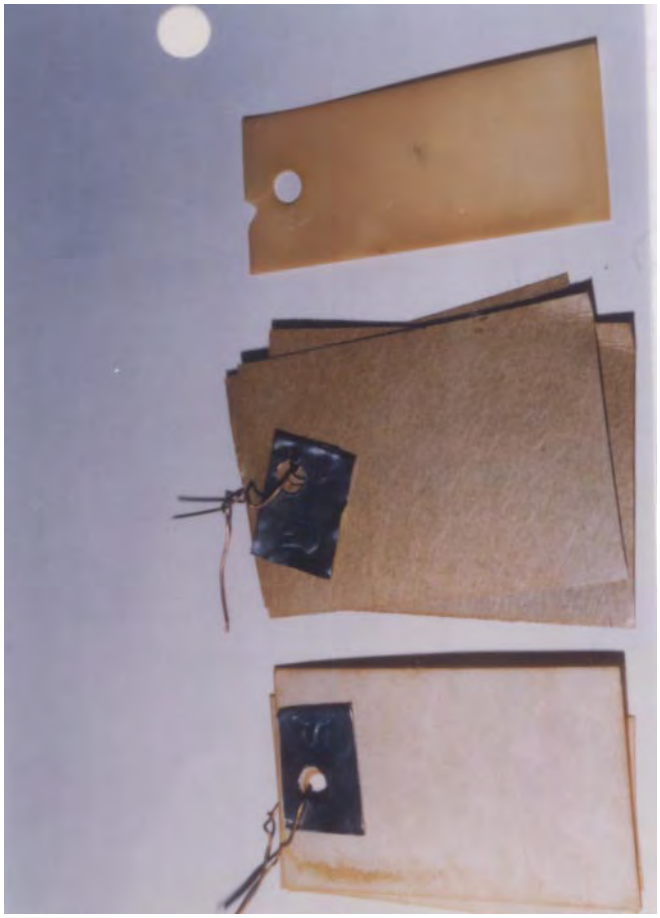
Photograph #3(above)
Photograph #4(below)



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Photograph #8(below)

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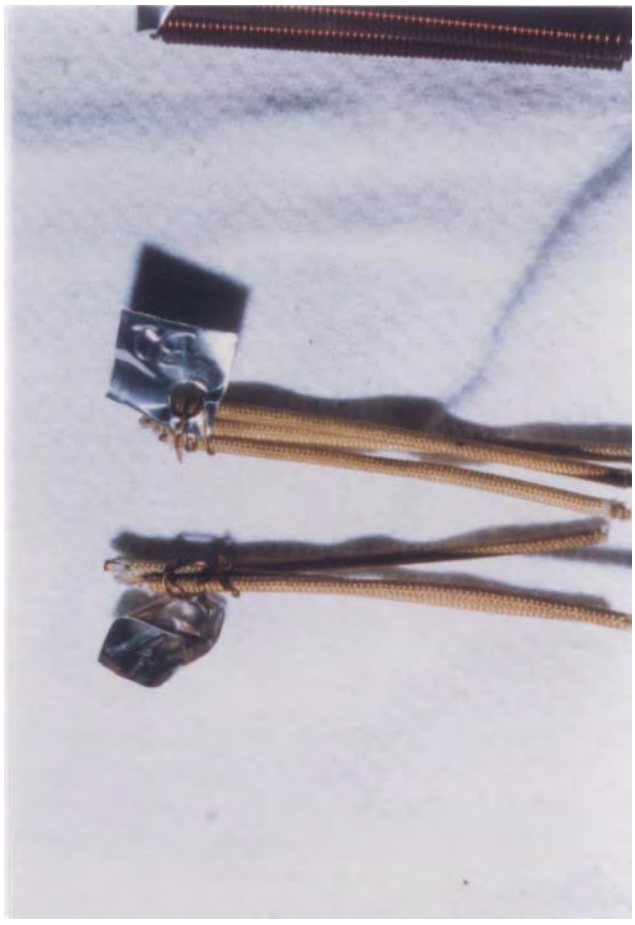
Photograph #10(below)

Photograph #11(above)
Photograph #12(below)

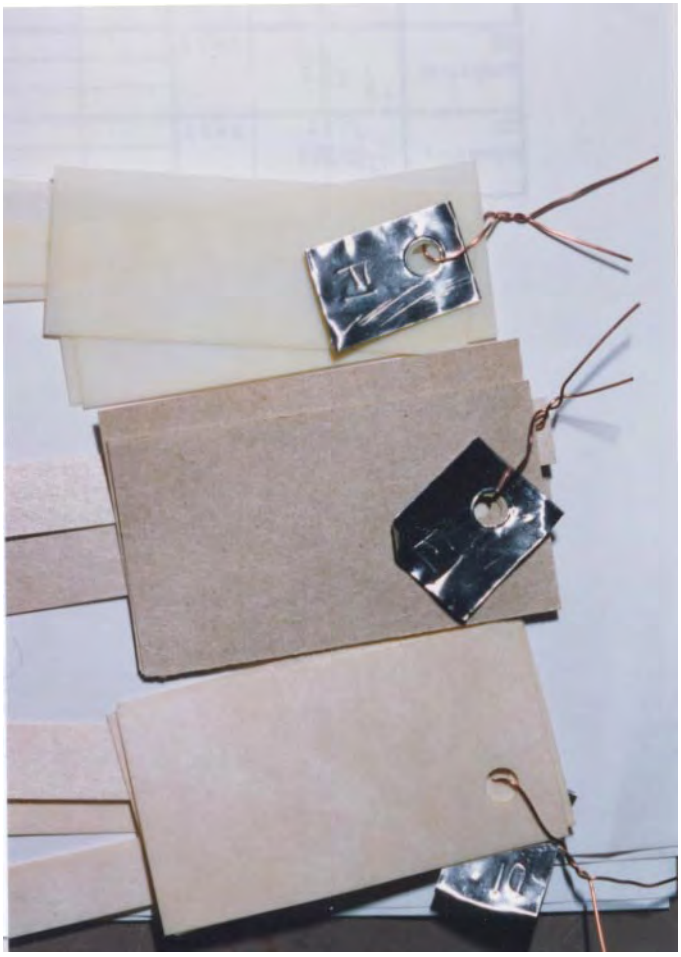


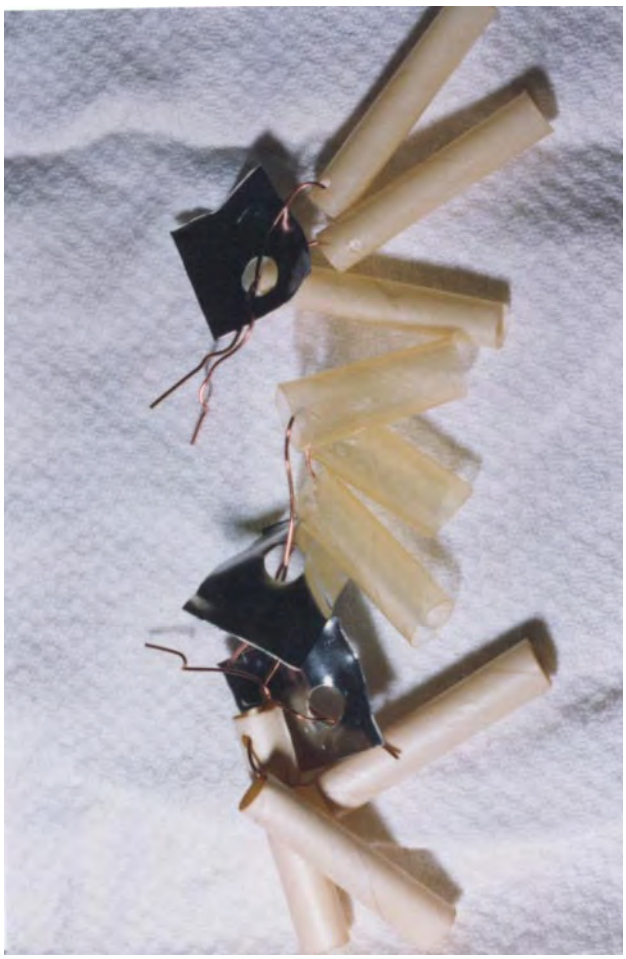
Appendix P

Photographs of Motor Materials after Exposure to HCFC-142b/Shrieve Zerol-150

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Varnish Disks(top to bottom-right) Iso-800, 923, Y-833,(top to bottom-left) ER-610, Y-390 and U-475 after 500 hour exposure to refrigerant/lubricant.
7	Lead wire after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
9	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
10	Tested Tie Cords after 500 hour exposure to refrigerant lubricant plus the 24 hour air bake.
11	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
12	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
14	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
15	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant plus a 24 hour air bake.





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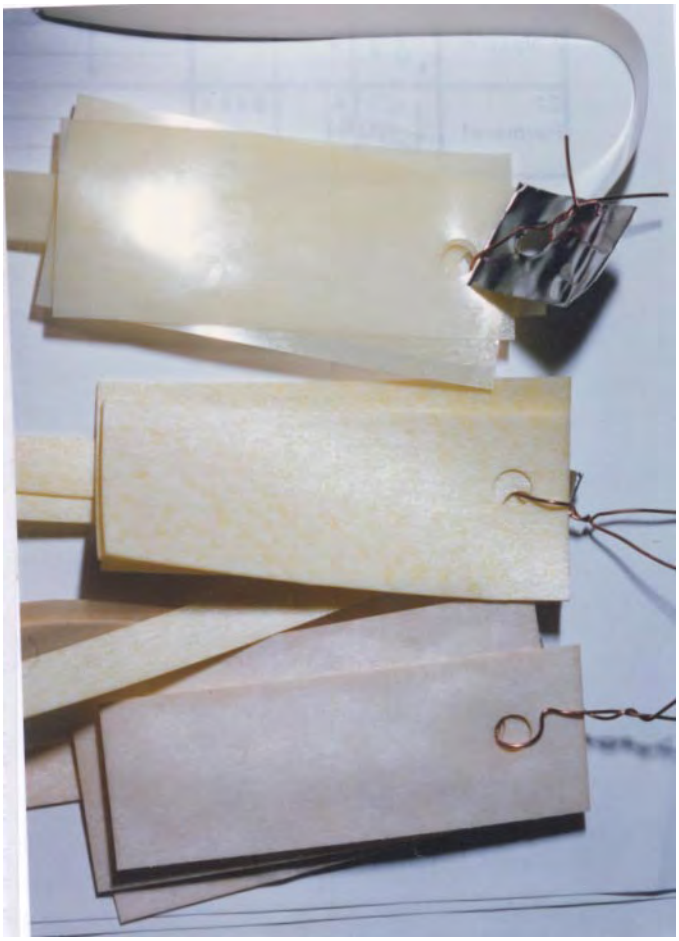

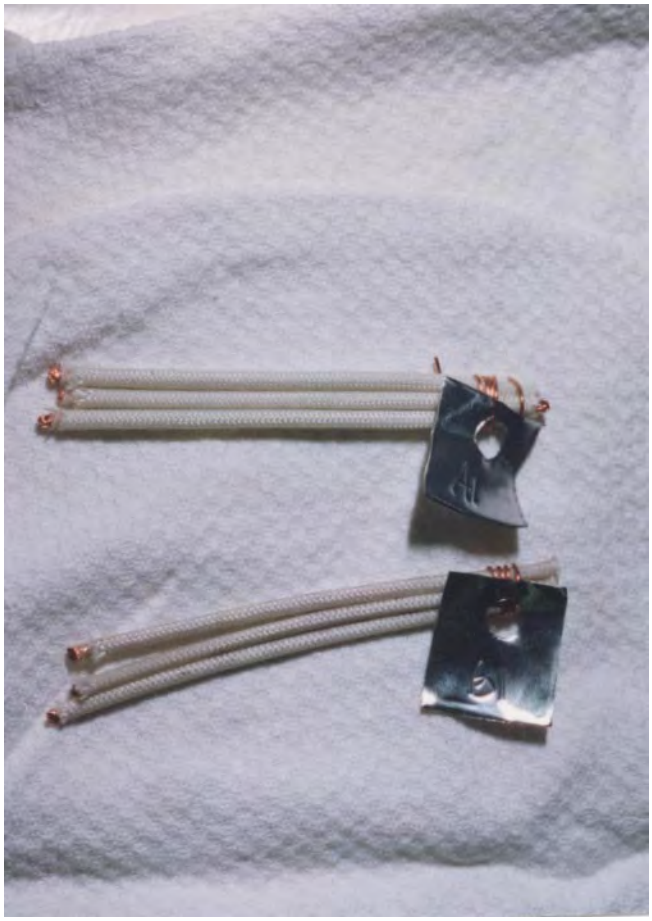

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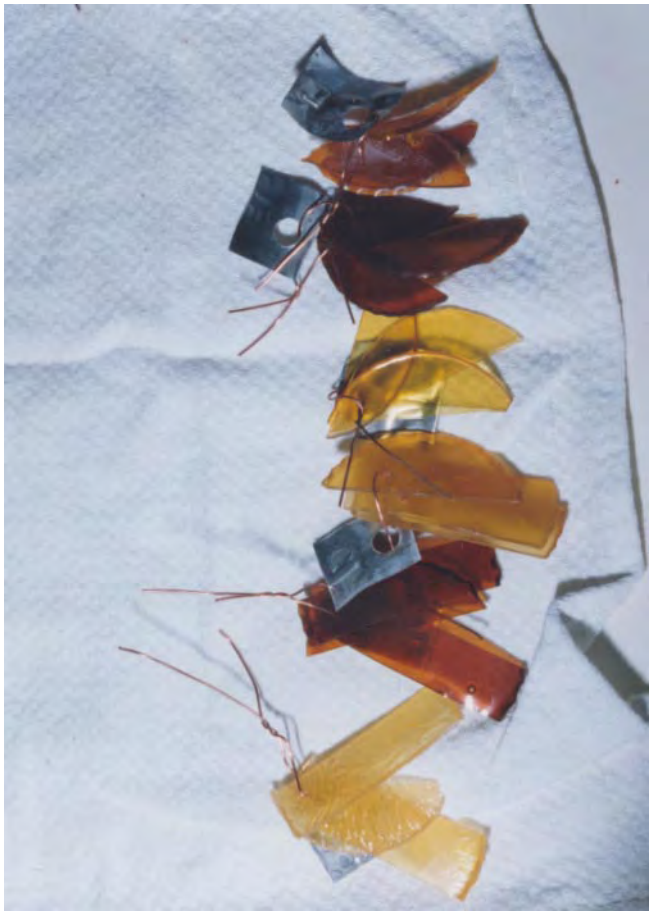

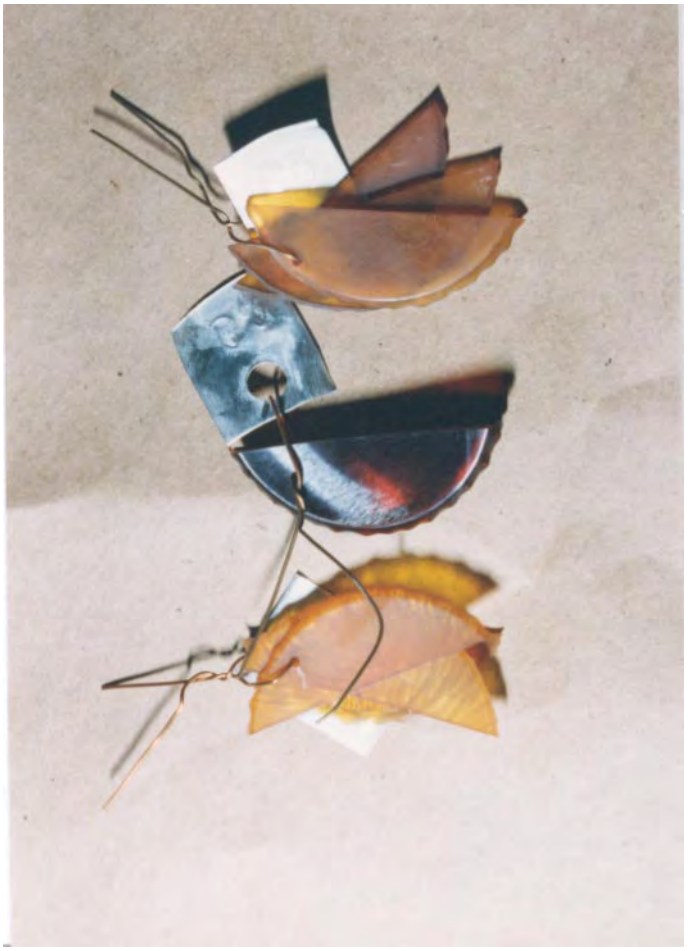

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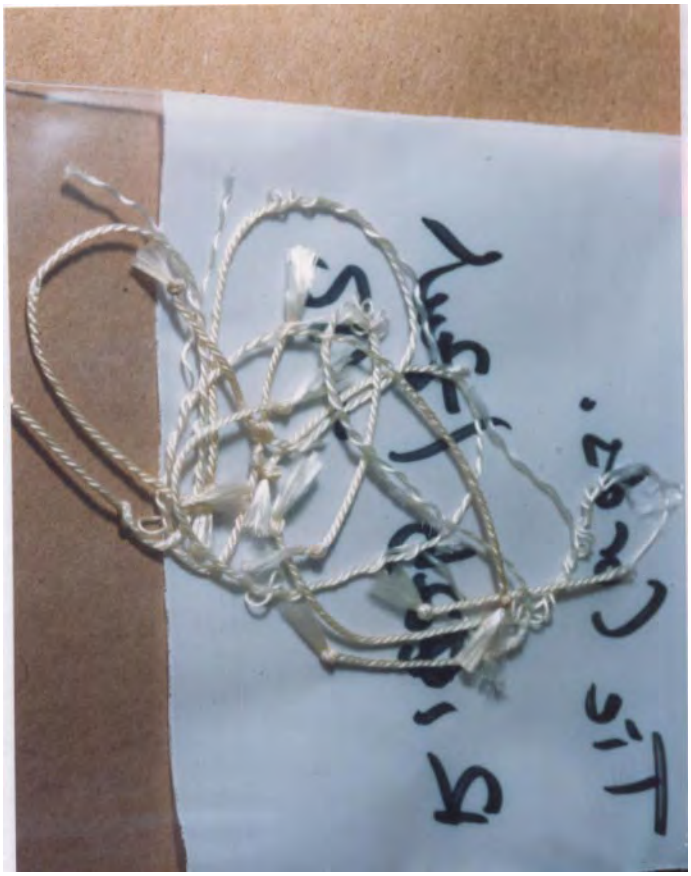
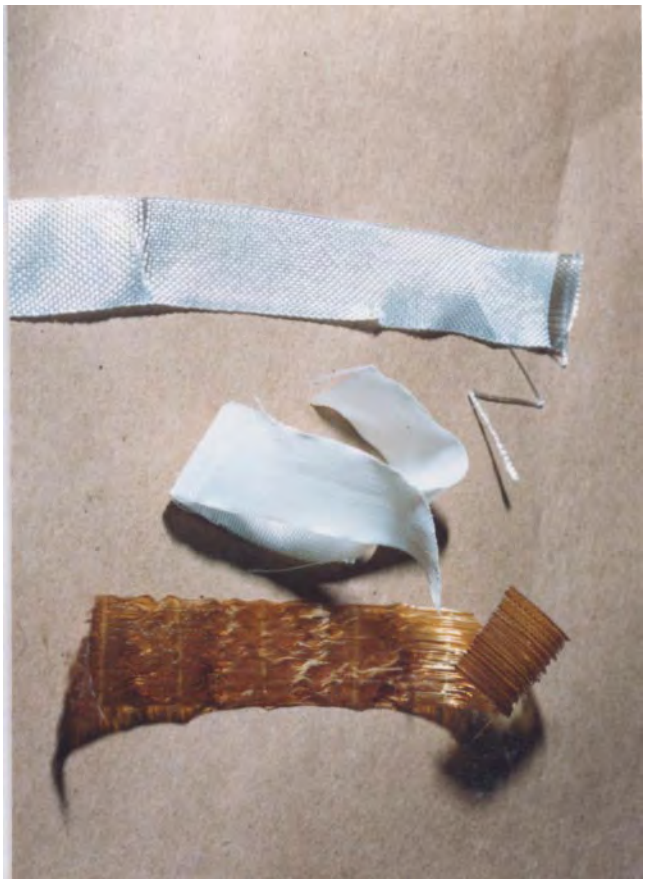




Photograph #13(above)
Photograph #14(below)

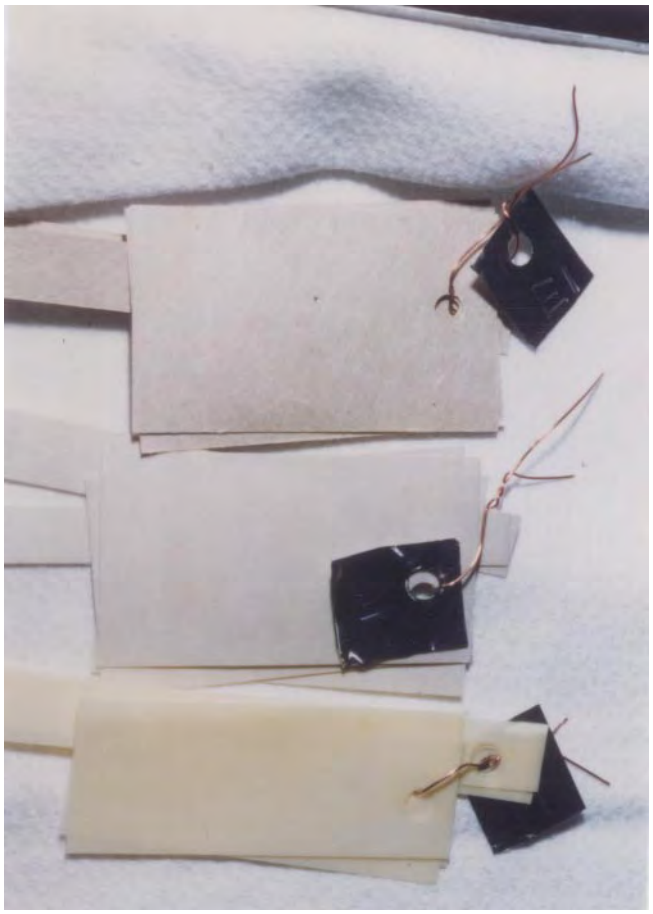
Photograph #15(above)

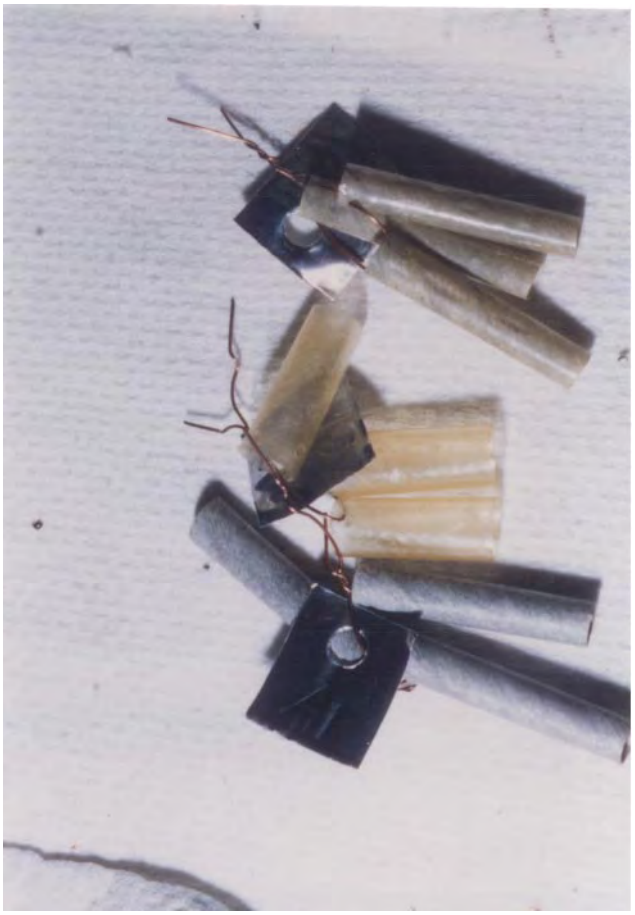
Appendix Q

Photographs of Motor Materials after Exposure to HFC-152a/Shrieve Zerol-150

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390 and U-475 after 500 hour exposure to refrigerant/lubricant.
7	Lead wire after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
9	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
10	Tested Tie Cords after 500 hour exposure to refrigerant lubricant plus the 24 hour air bake.
11	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
12	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
14	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
15	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant plus a 24 hour air bake.





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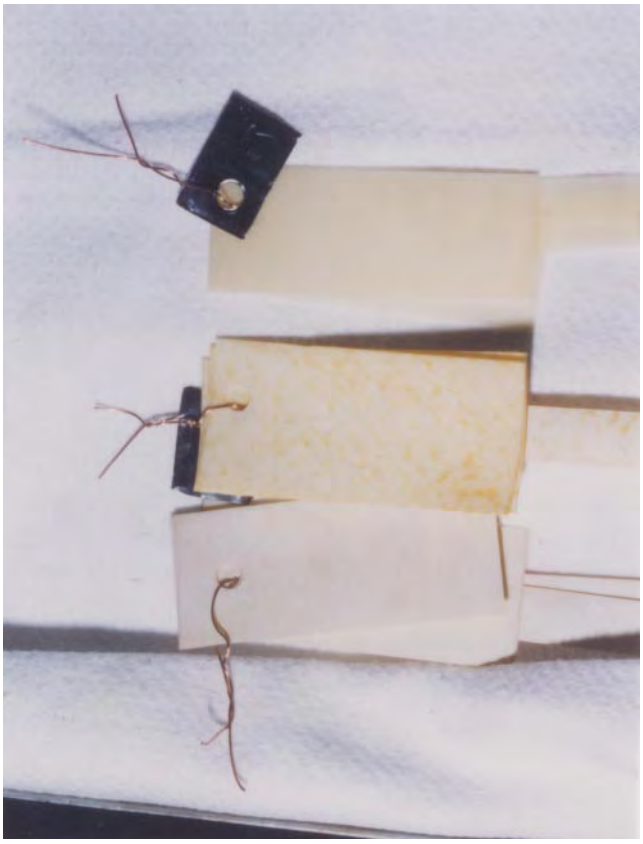
Photograph #4(below)



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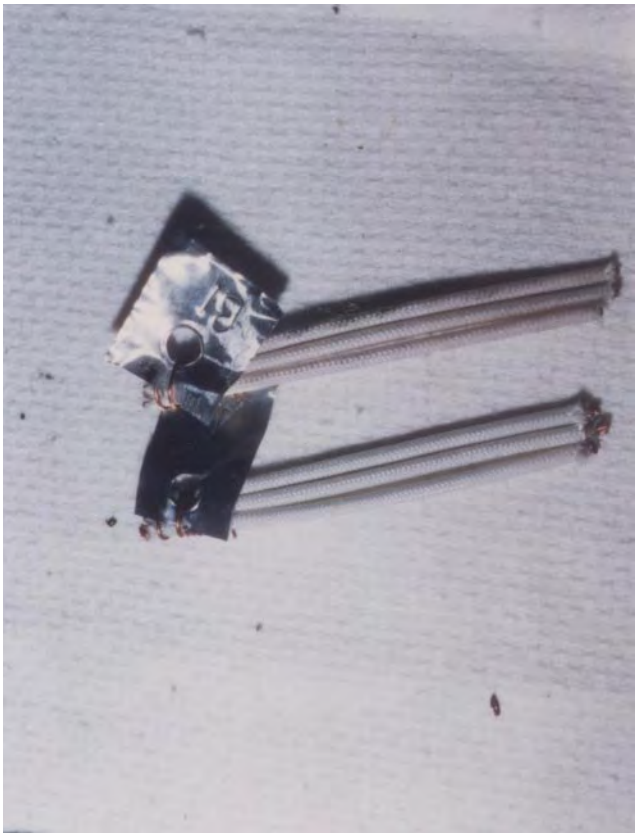

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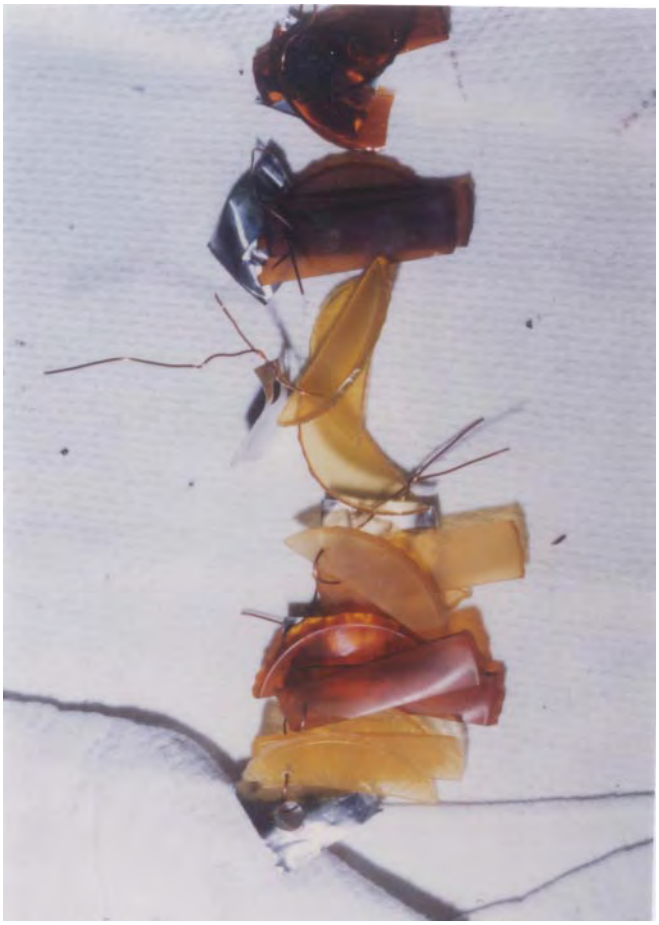

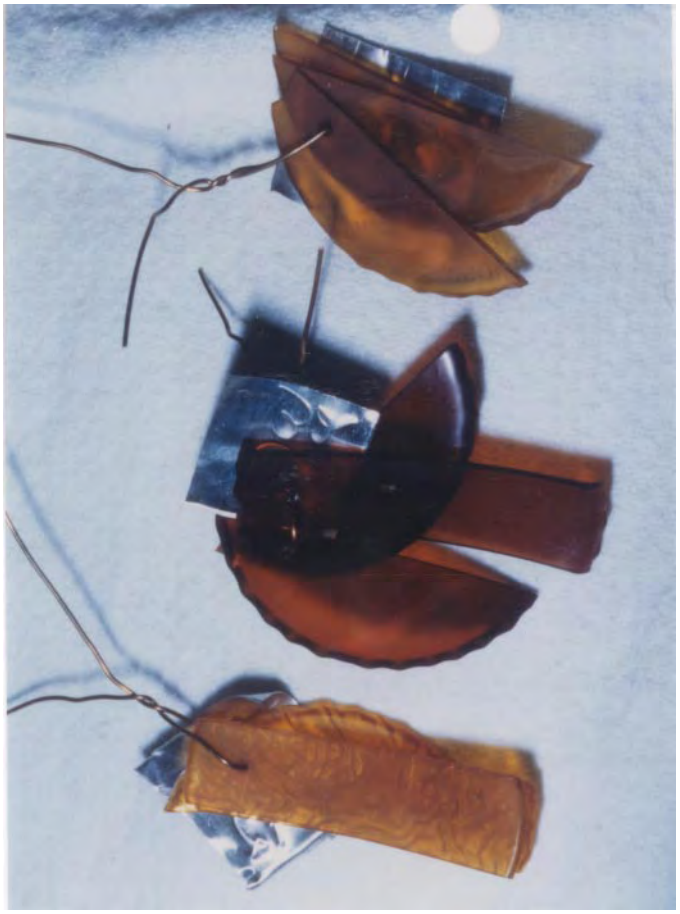

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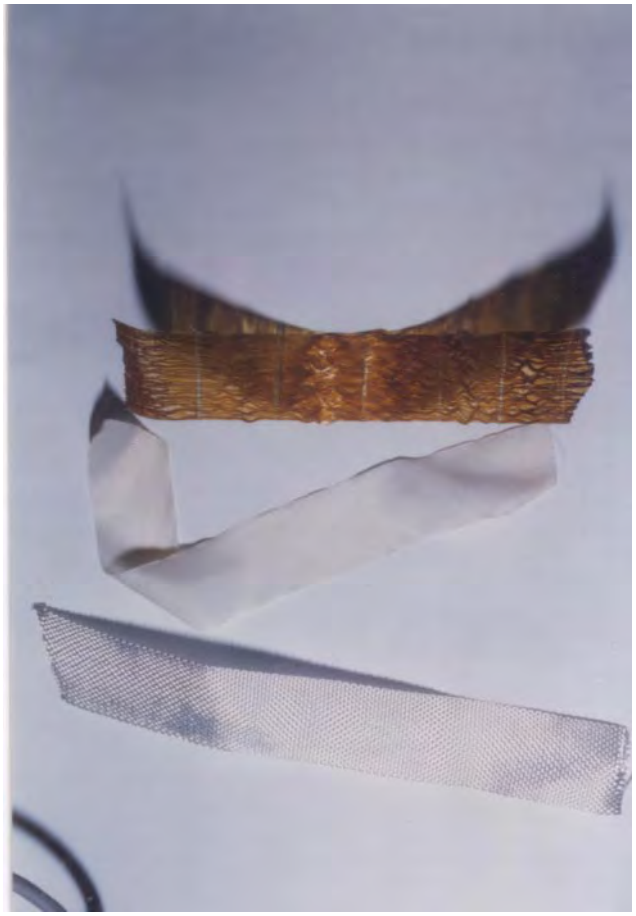

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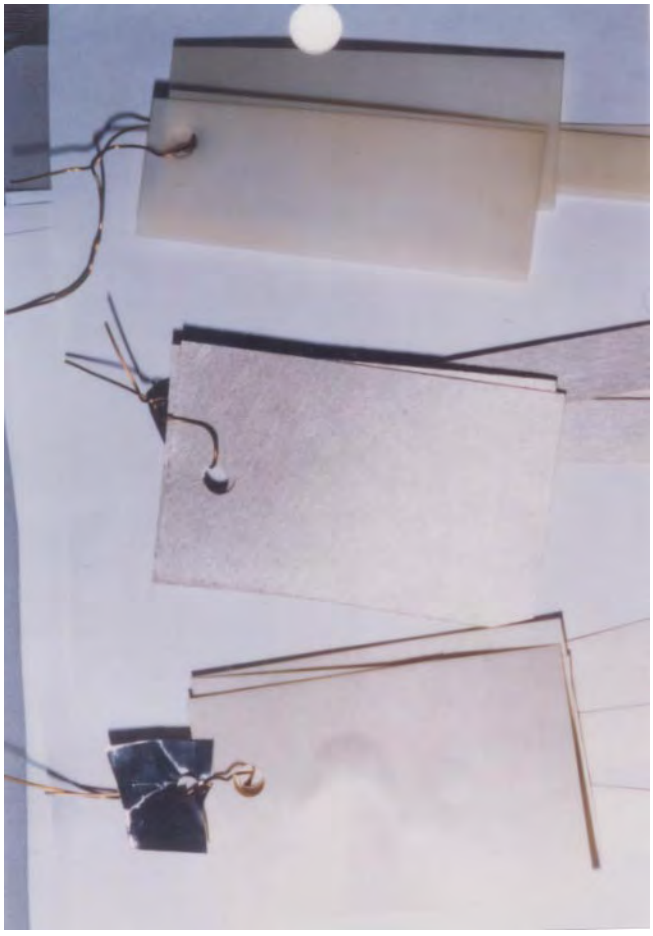
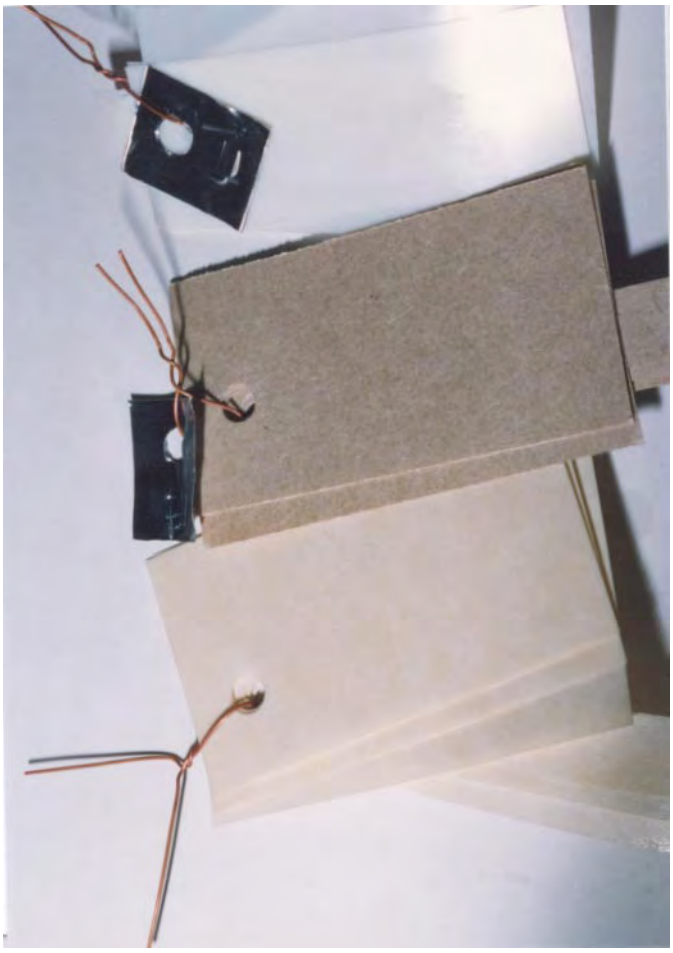


Appendix R

Photographs of Motor Materials after Exposure to HFC-134a/ICI Emkarate RL244.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Lead wire after 500 hour exposure to refrigerant/lubricant.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant.
9	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
10	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
11	Tested Tie Cords after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
12	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
14	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
15	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
16	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant-lubricant plus a 24 hour air bake.



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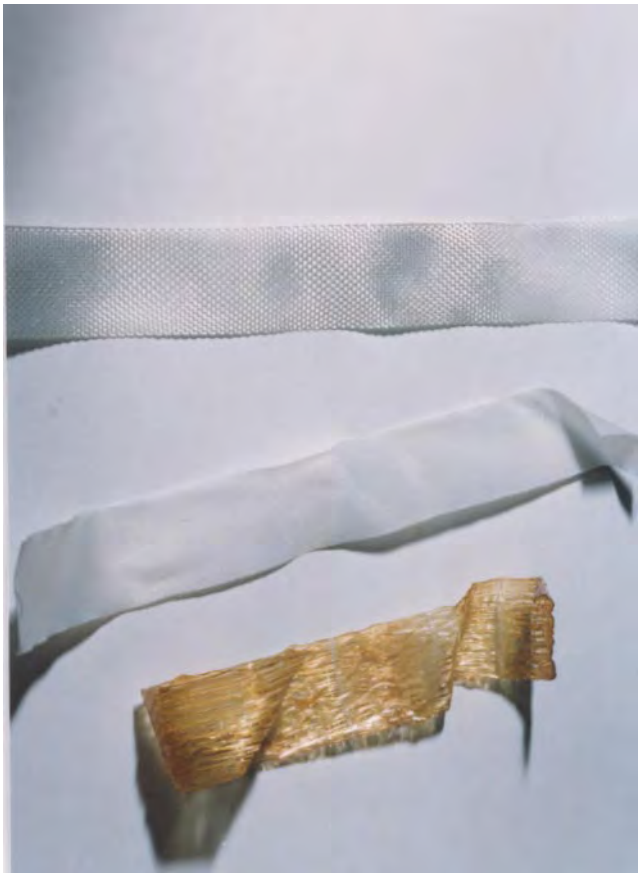

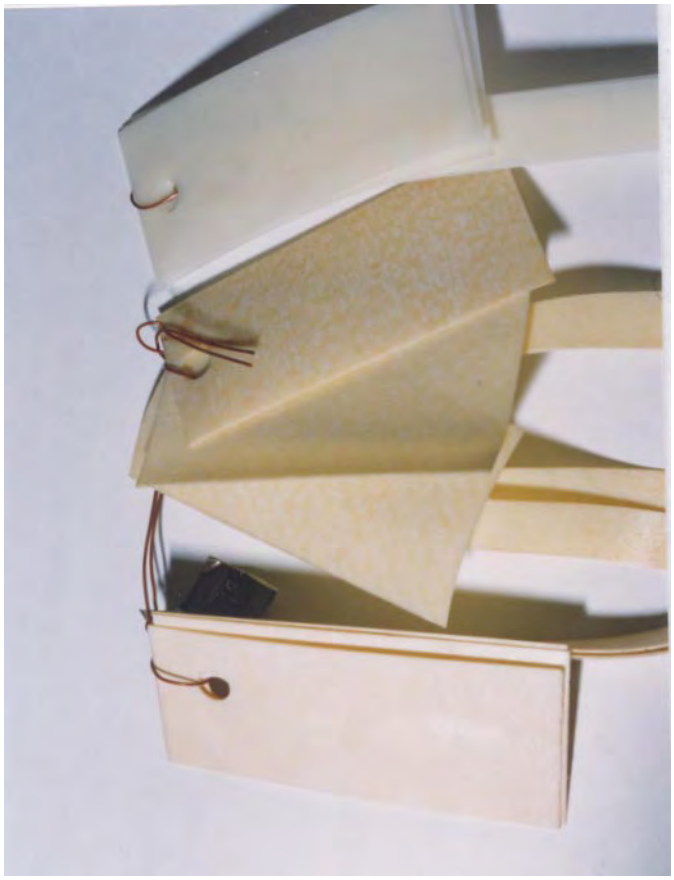

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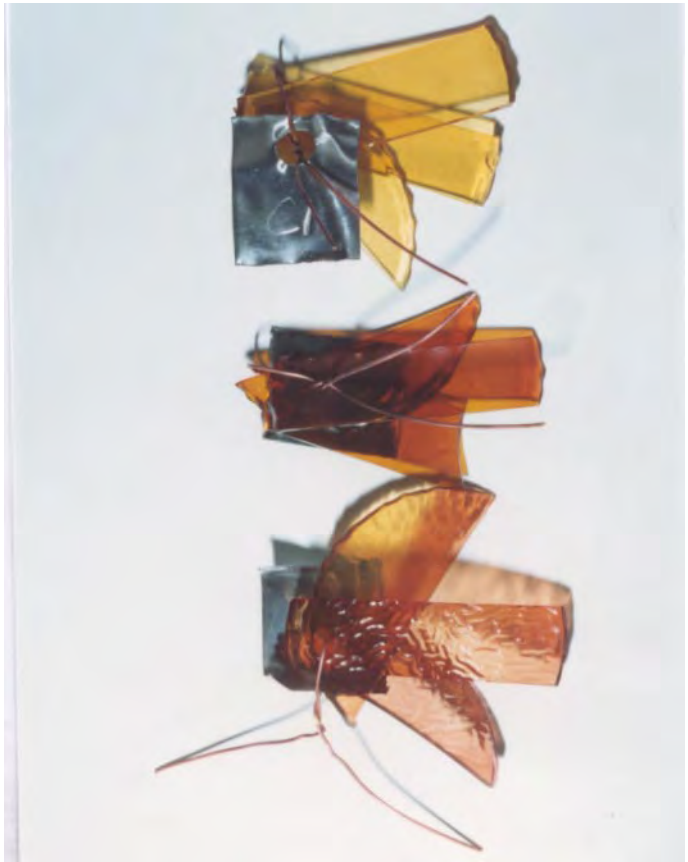
Photograph #8(below)



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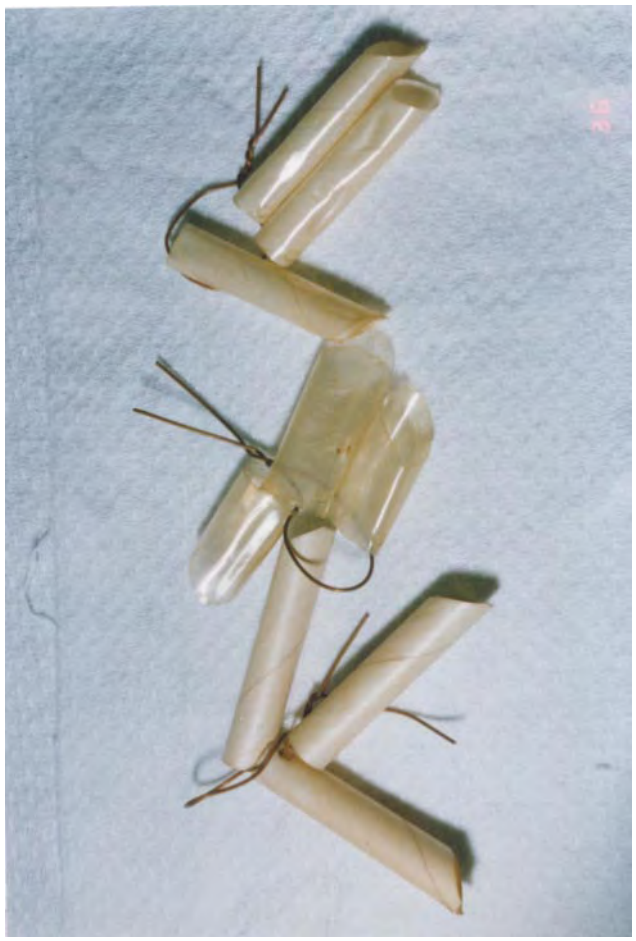
Photograph #11(above)
Photograph #12(below)



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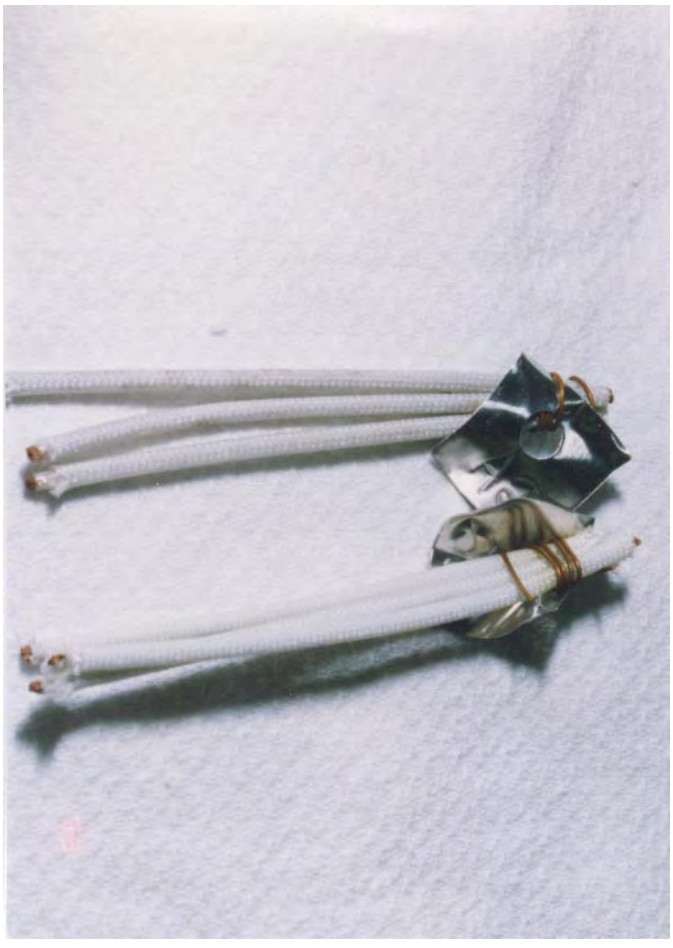
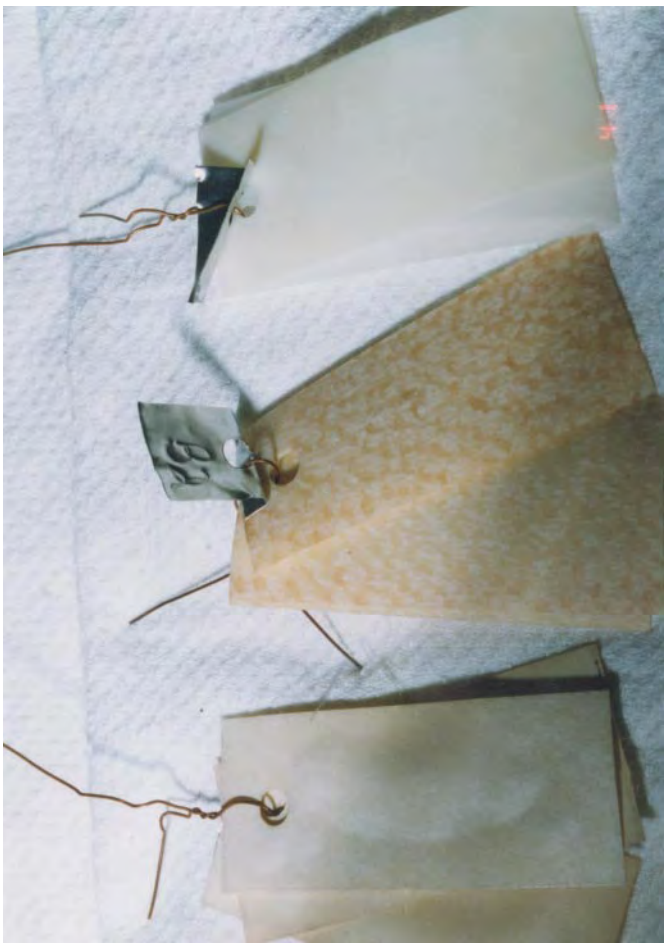
Photograph #14(below)

Photograph #15(above)
Photograph #16(below)



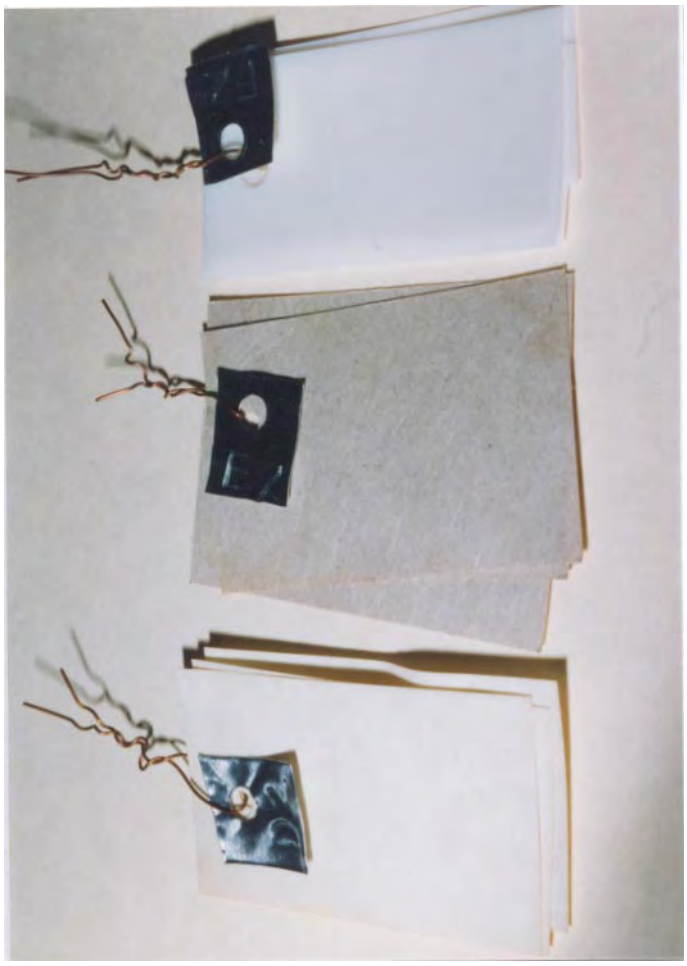


Appendix S

Photographs of Motor Materials after Exposure to HFC-134a/Emery lso-32.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Lead wire after 500 hour exposure to refrigerant/lubricant.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant.
9	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
10	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
11	Tested Tie Cords after 500 hour exposure to refrigerant lubricant plus the 24 hour air bake.
12	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
14	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
15	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
16	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant plus a 24 hour air bake.



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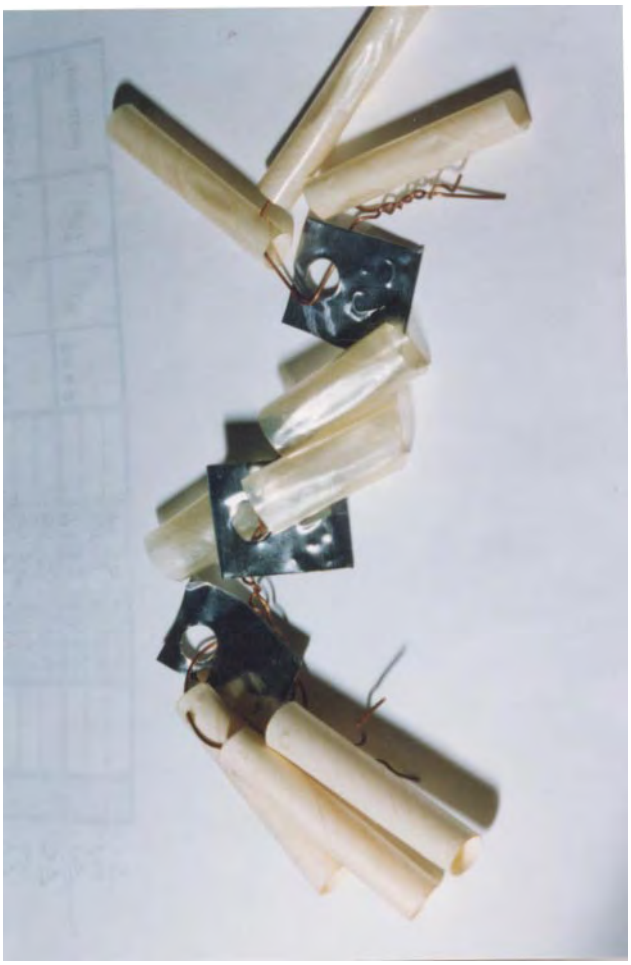

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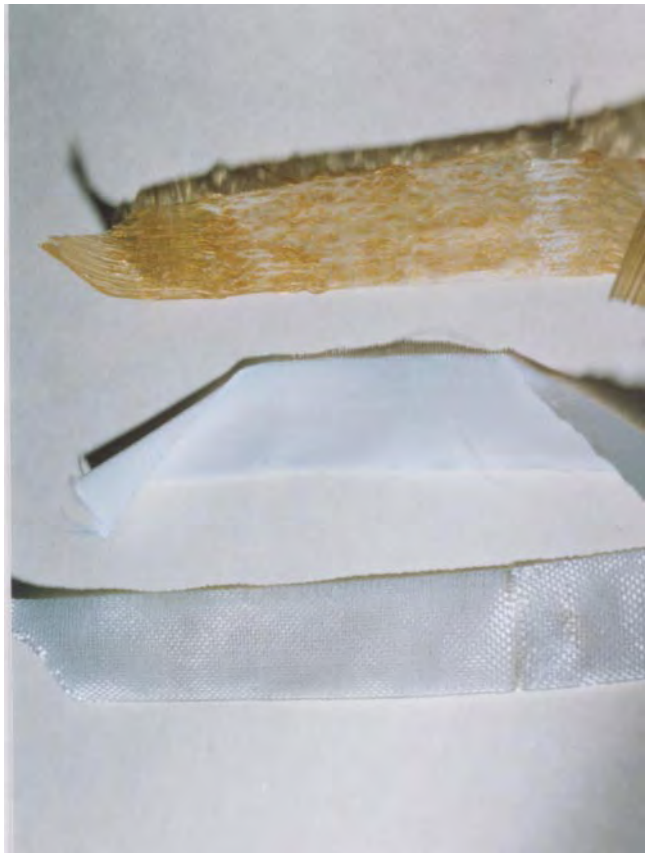

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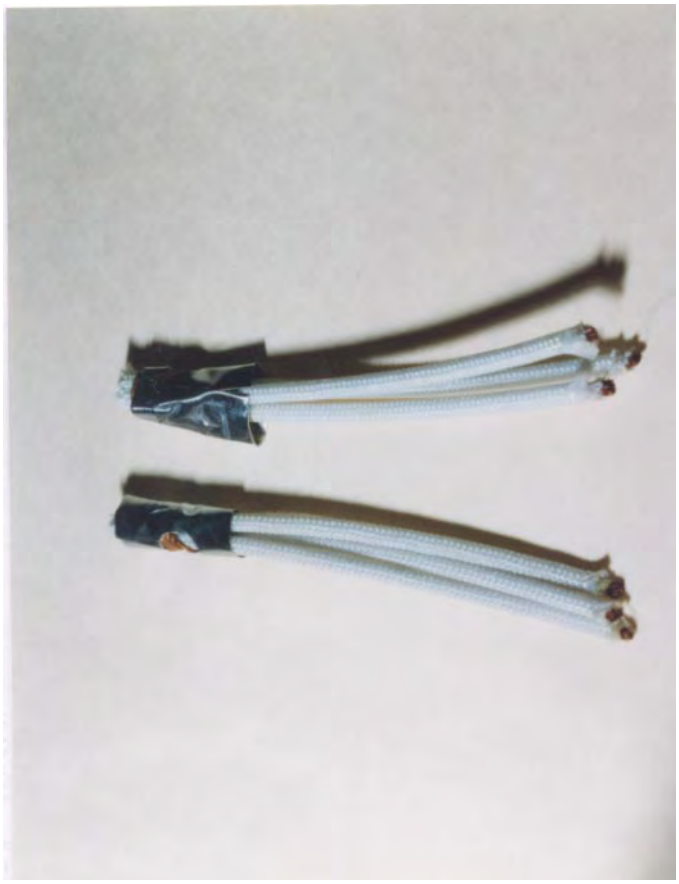

Photograph #9(above)
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Photograph #11(above)
Photograph #12(below)

Photograph #13(above)
Photograph #14(below)

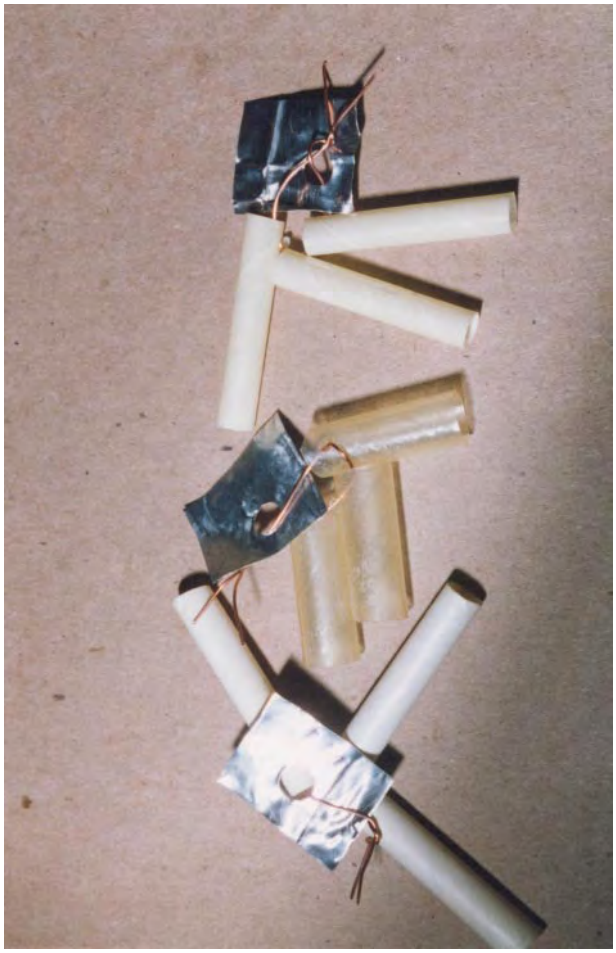
Photograph #15(above)
Photograph #16(below)

Appendix T

Photographs of Motor Materials after Exposure to HFC-143a/Emery Iso-32.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Lead wire after 500 hour exposure to refrigerant/lubricant.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant.
9	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
10	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
11	Tested Tie Cords after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
12	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
14	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
15	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
16	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant-lubricant plus a 24 hour air bake.



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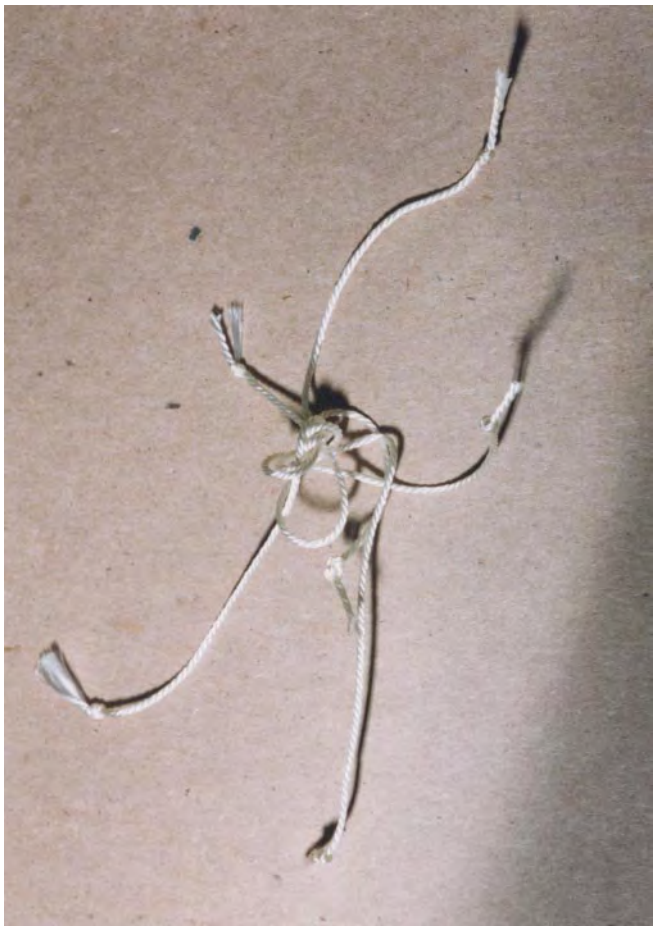

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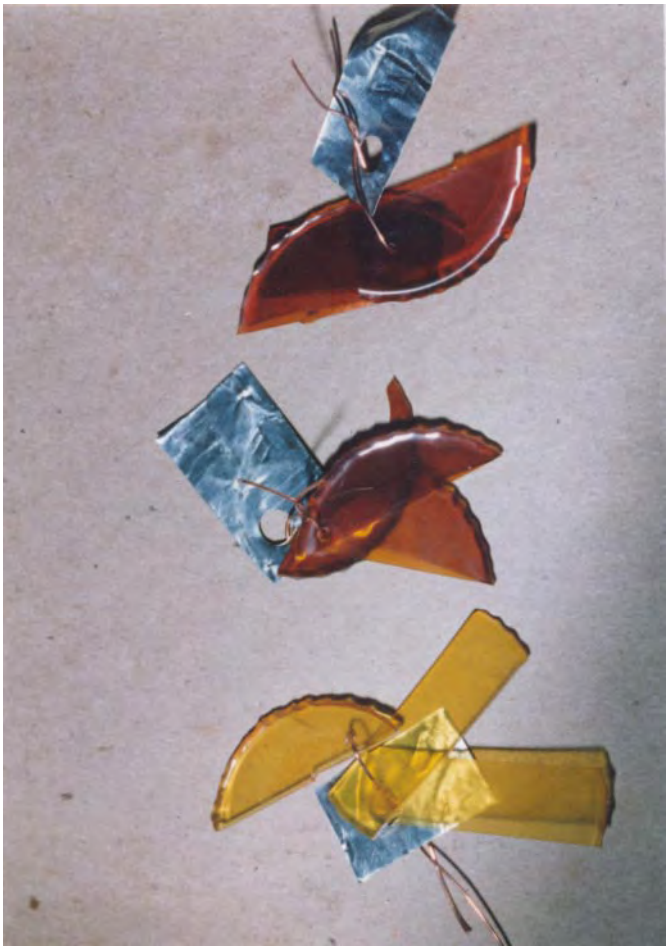

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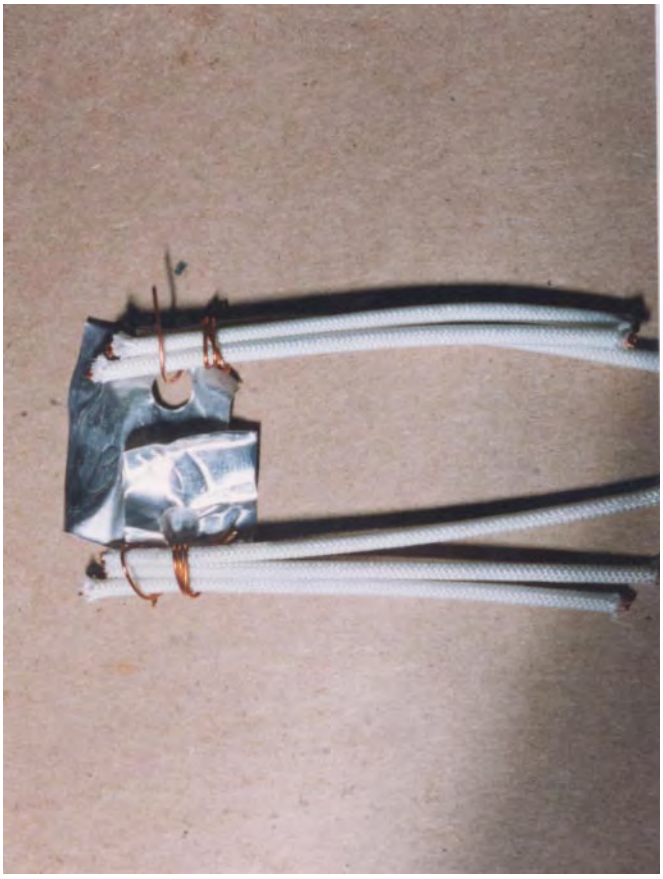

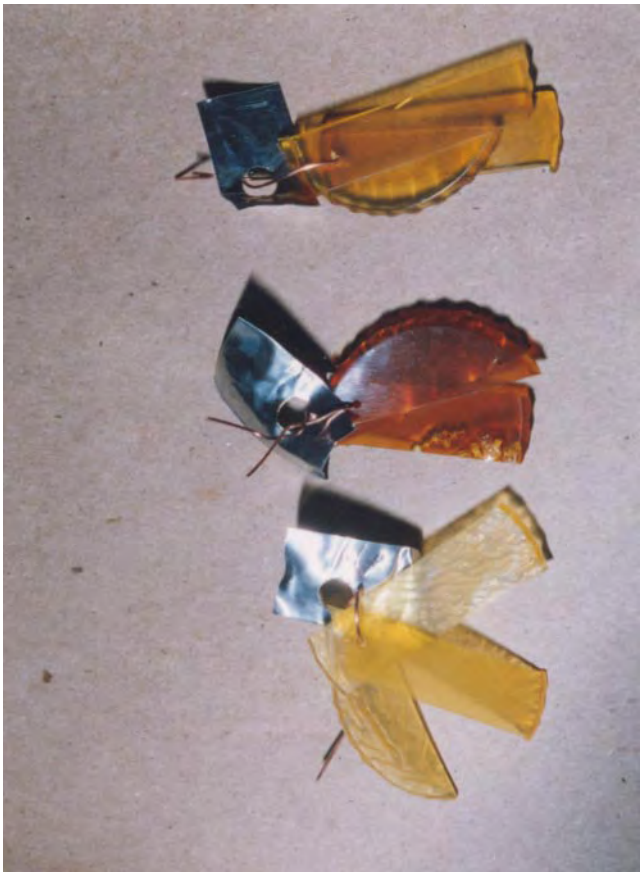

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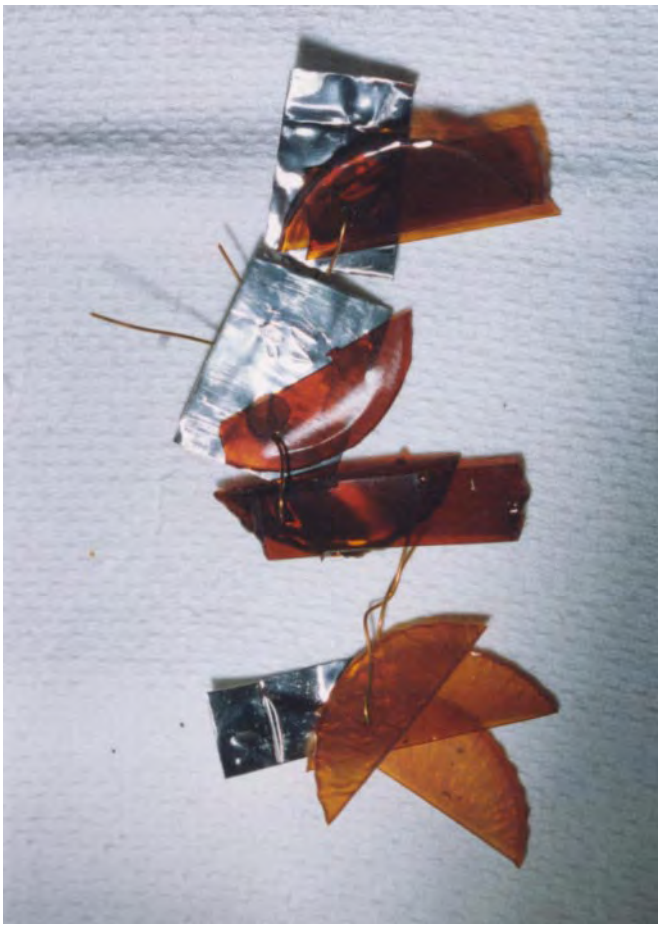

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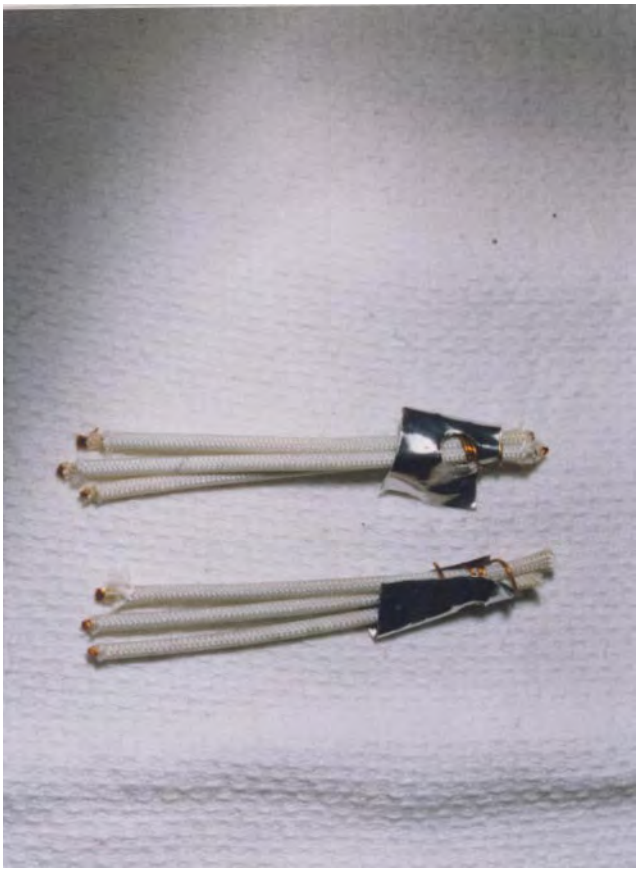
Photograph #15(above)
Photograph #16(below)

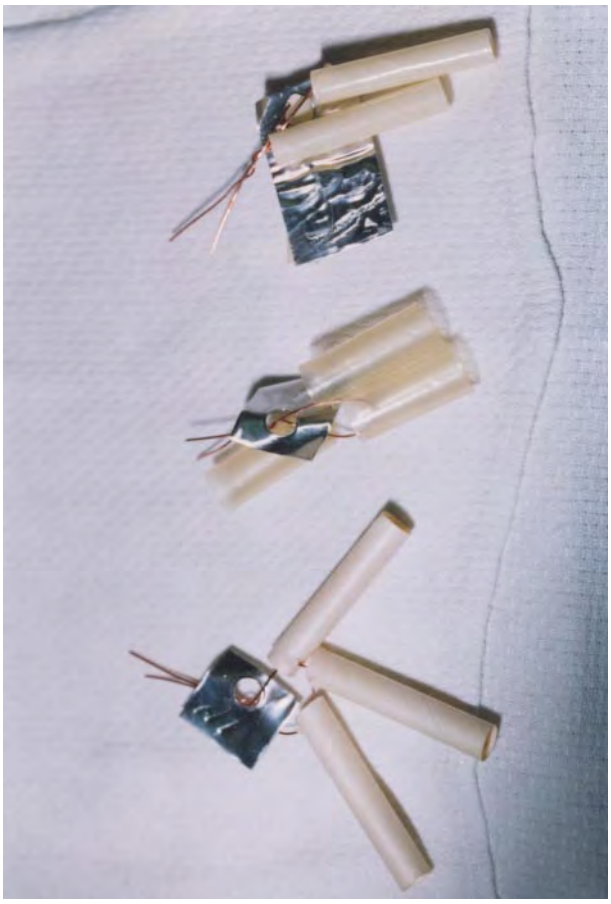


Appendix U

Photographs of Motor Materials after Exposure to HFC-134/Emery 32.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Lead wire after 500 hour exposure to refrigerant/lubricant.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant.
9	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
10	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
11	Tested Tie Cords after 500 hour exposure to refrigerant lubricant plus the 24 hour air bake.
12	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
14	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
15	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
16	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant plus a 24 hour air bake.



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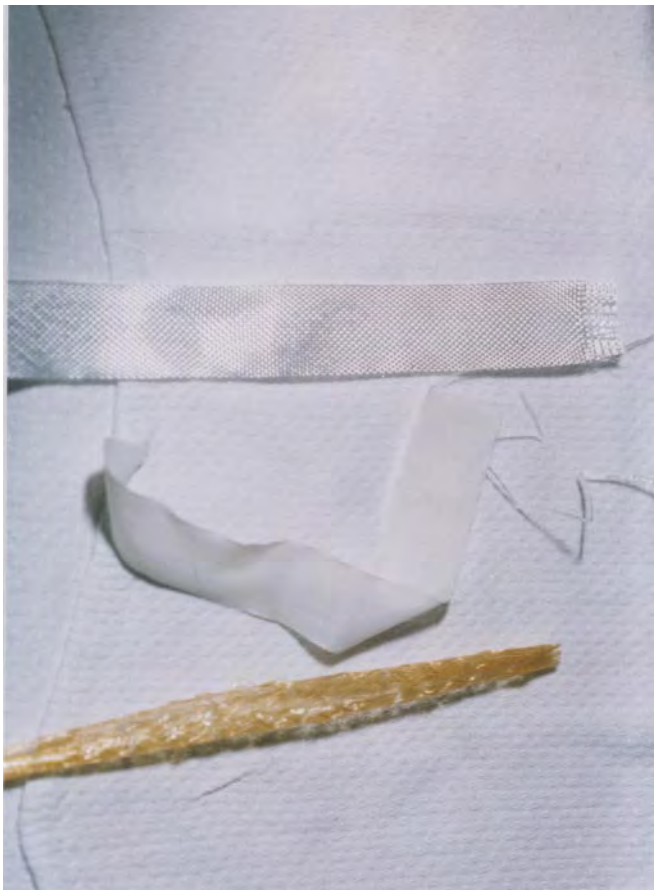
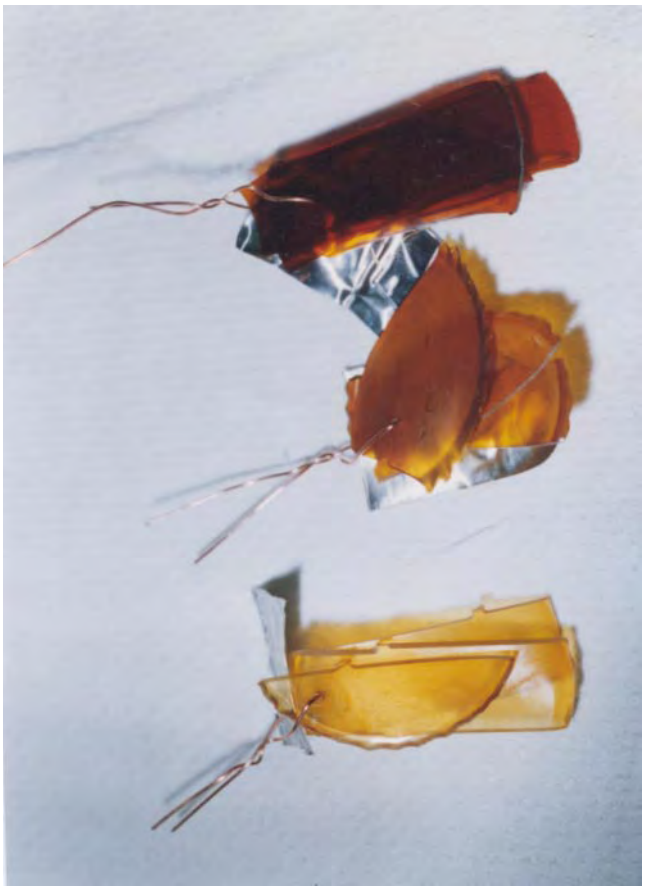
Photograph #4(below)





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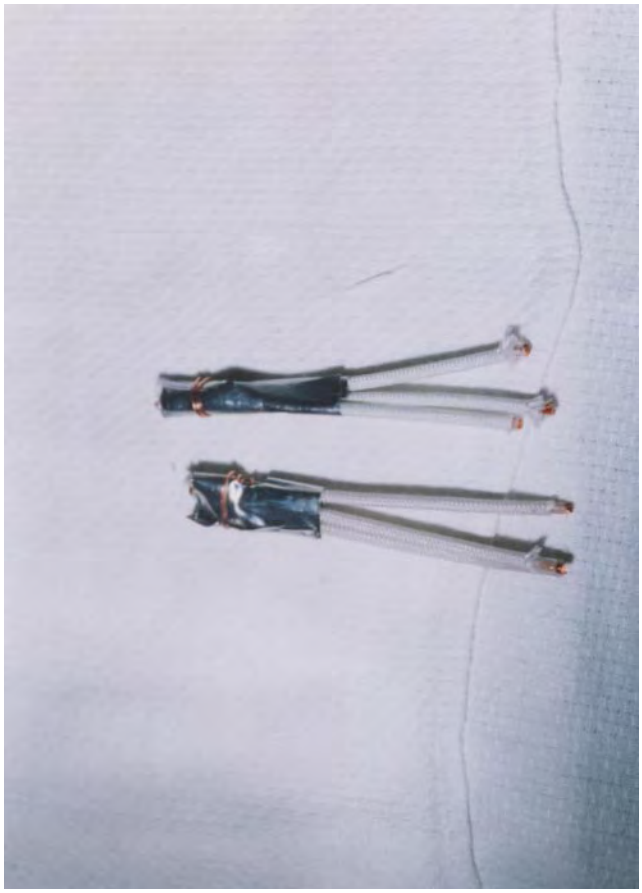

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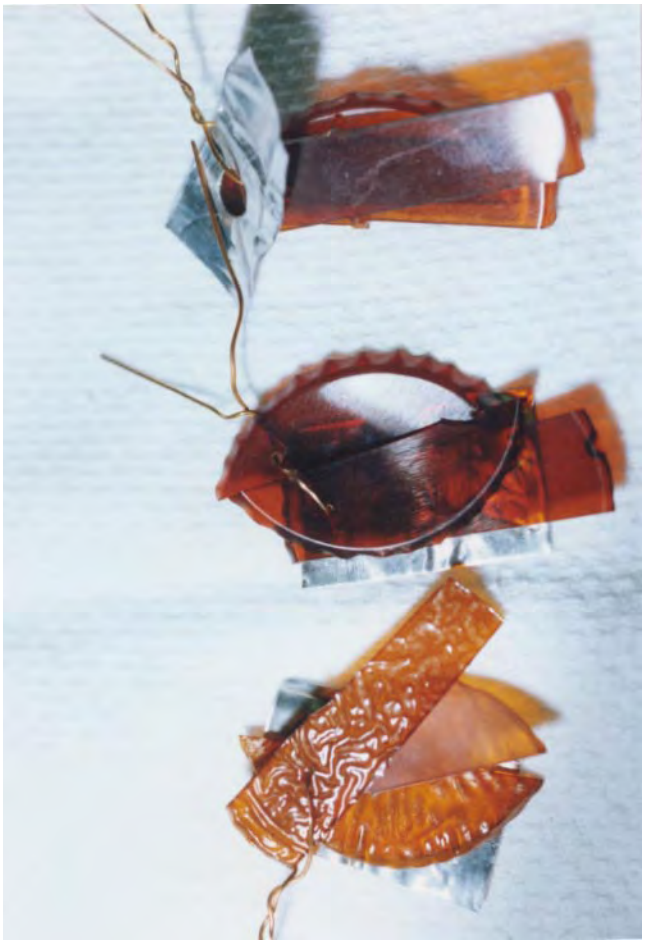
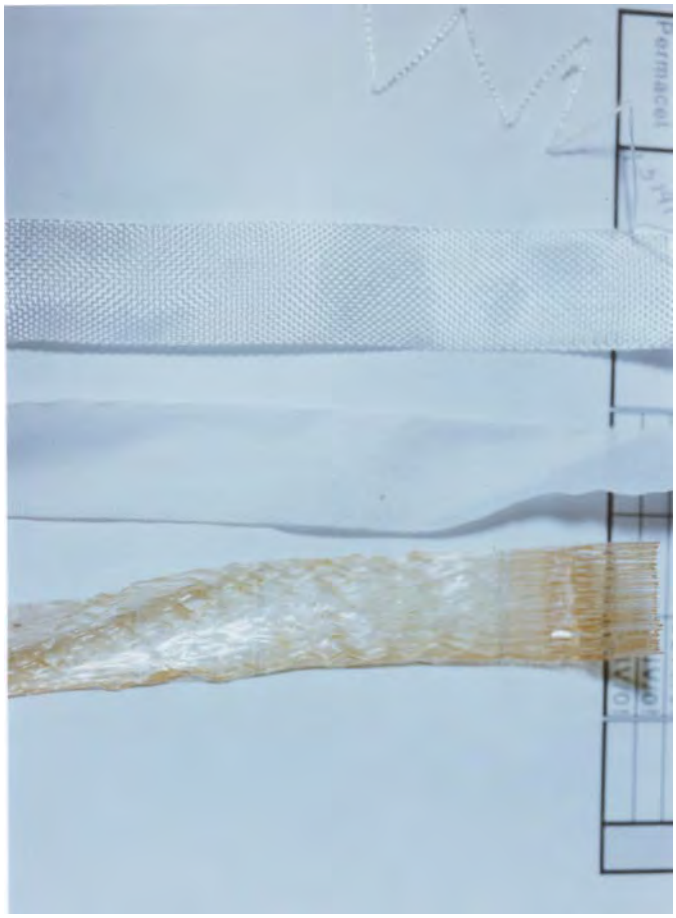




Photograph #13(above)
Photograph #14(below)

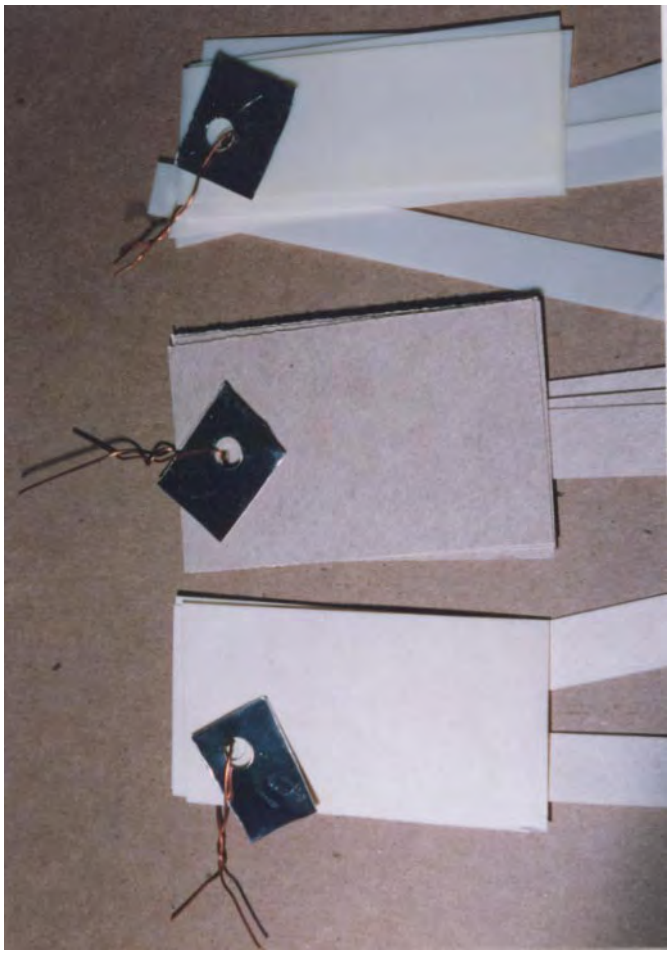
Photograph #15(above)
Photograph #16(below)

Appendix V

Photographs of Motor Materials after Exposure to HFC-32/Emery Iso-32.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Lead wire after 500 hour exposure to refrigerant/lubricant.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant.
9	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
10	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
11	Tested Tie Cords after 500 hour exposure to refrigerant lubricant plus the 24 hour air bake.
12	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
14	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
15	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
16	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant plus a 24 hour air bake.



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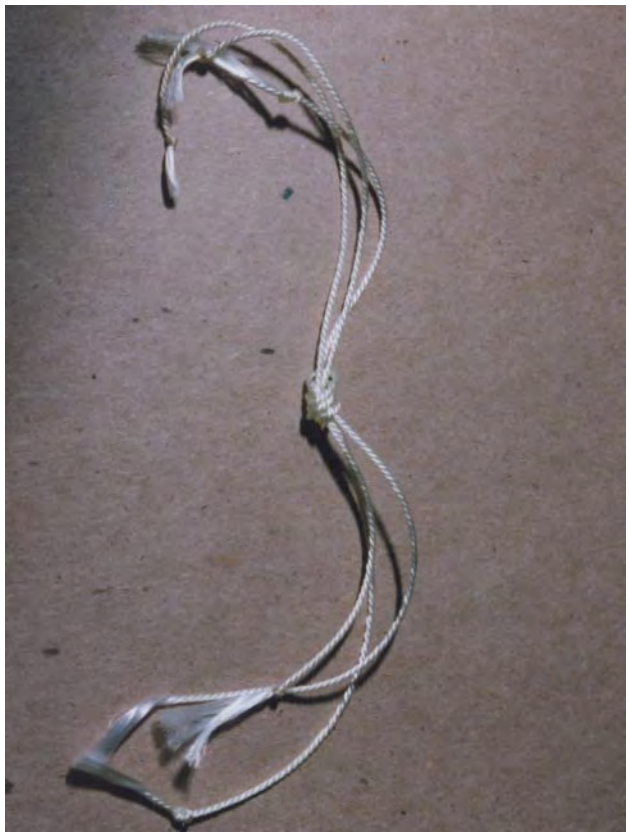

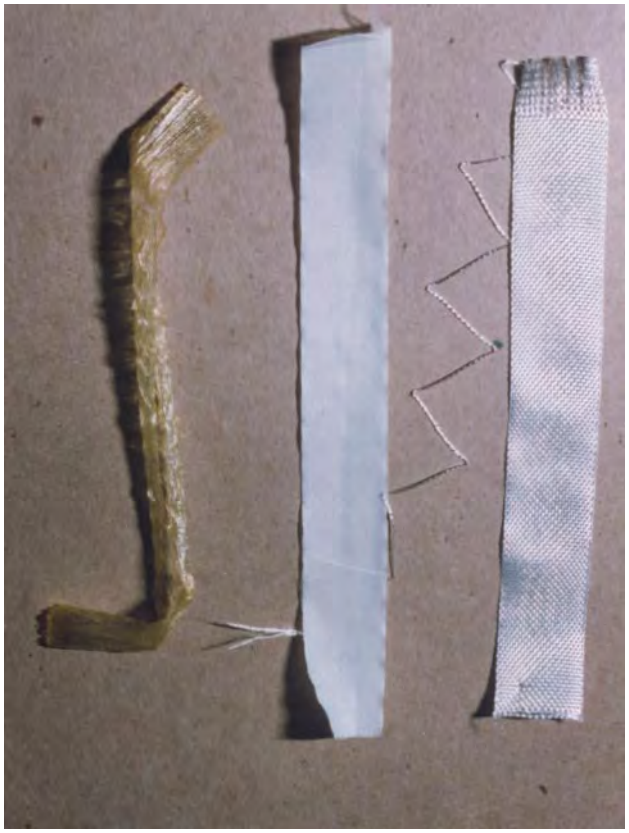

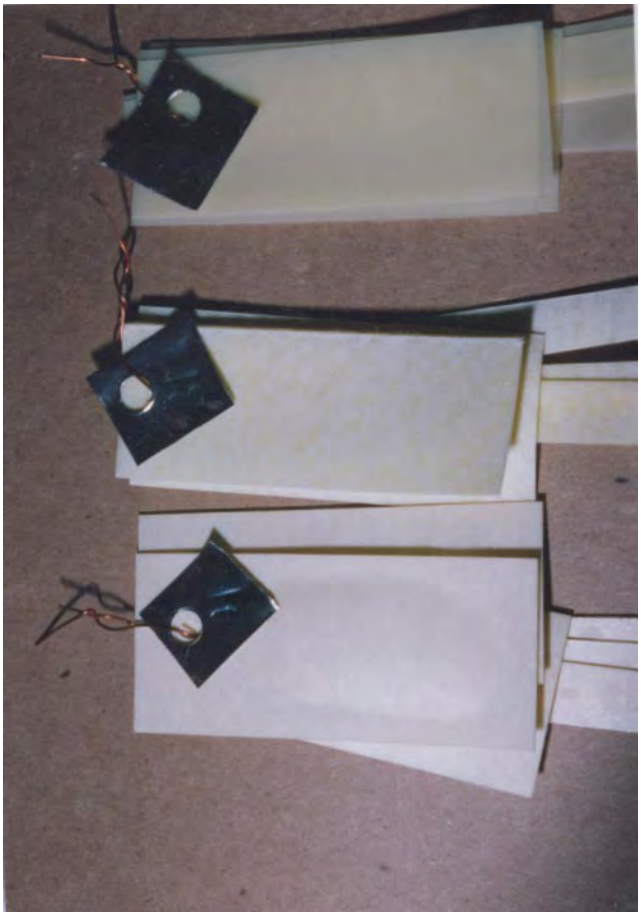

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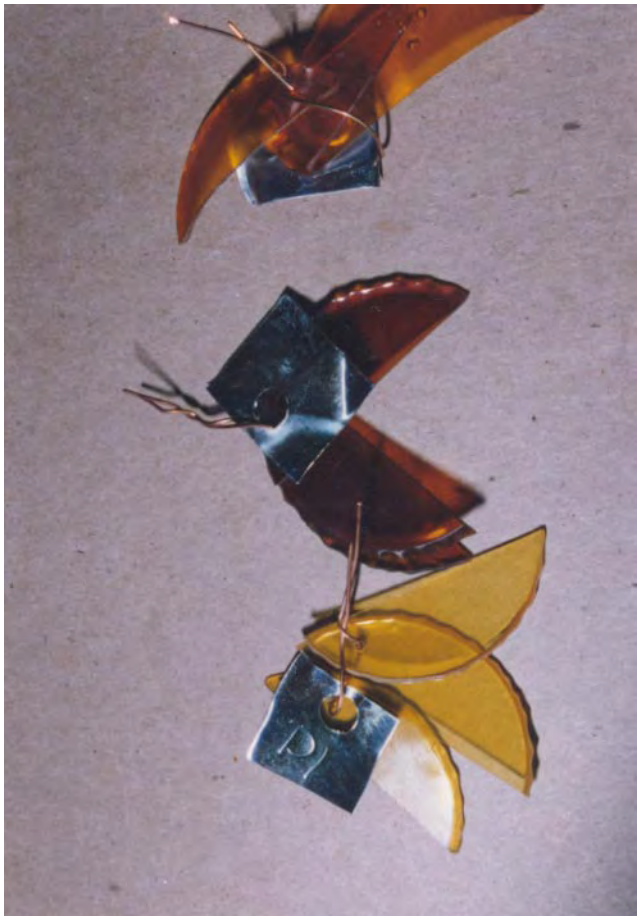

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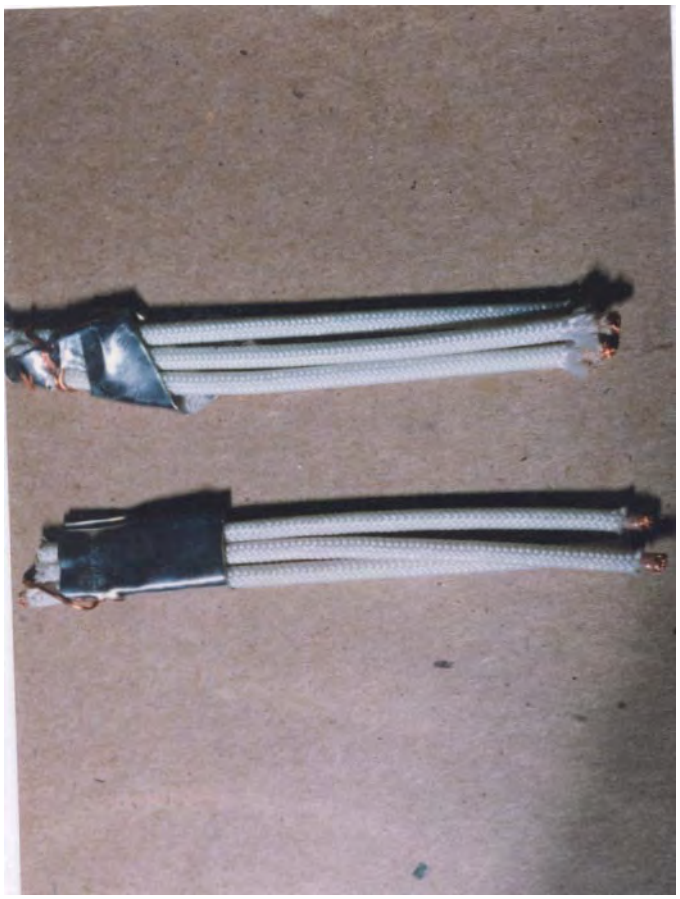

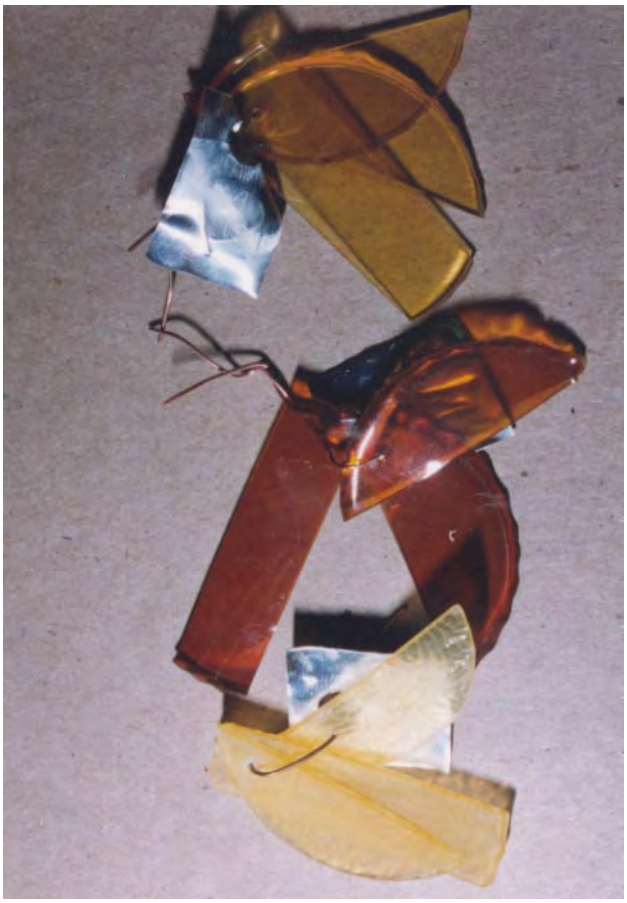

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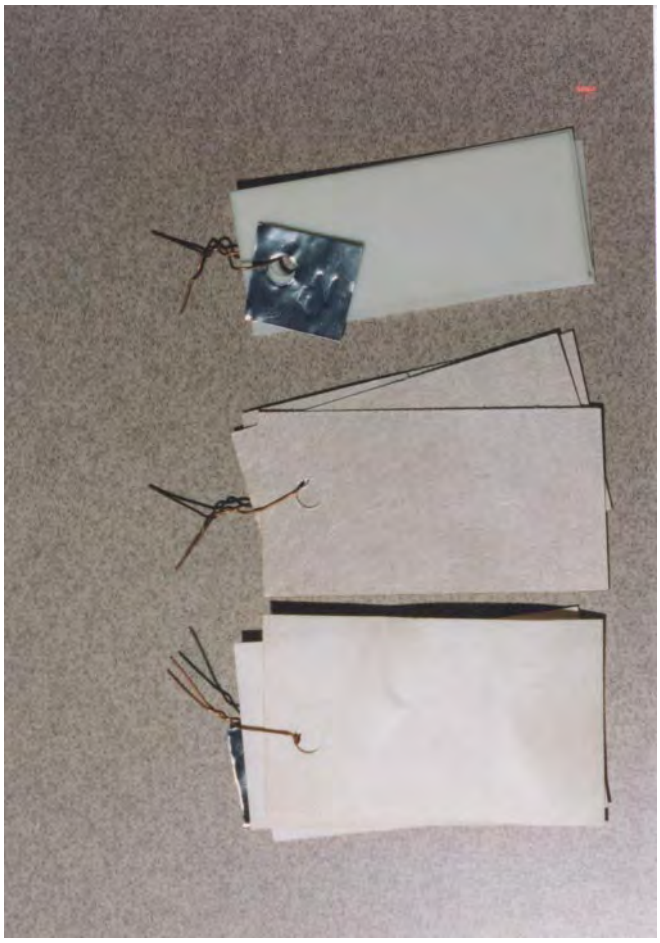
Photograph #12(below)



Photograph #13(above)
Photograph #14(below)

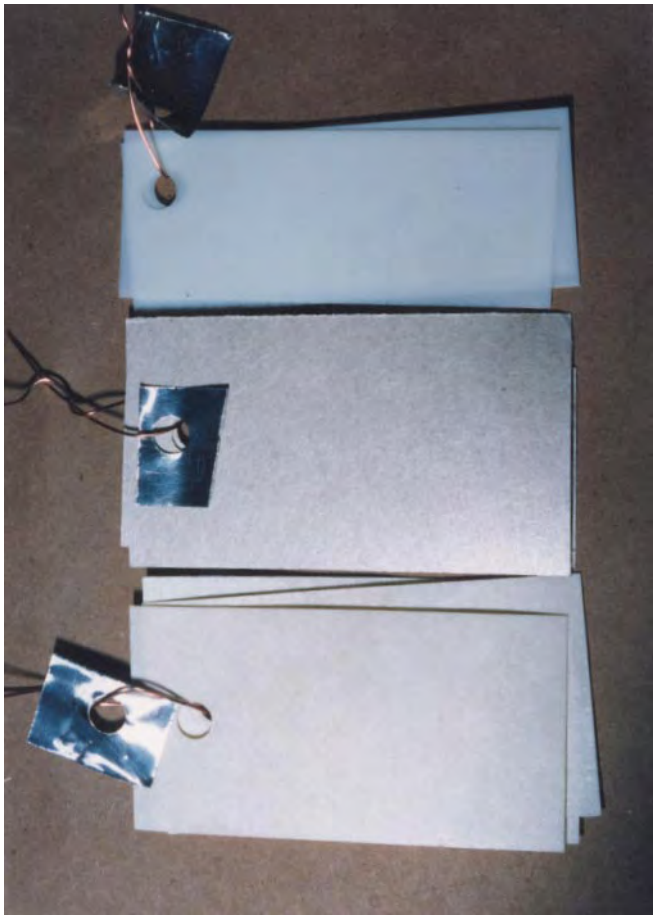
Photograph #15(above)
Photograph #16(below)

Appendix W

Photographs of Motor Materials after Exposure to HFC-125/Emery Iso-32.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Lead wire after 500 hour exposure to refrigerant/lubricant.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant.
9	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
10	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
11	Tested Tie Cords after 500 hour exposure to refrigerant lubricant plus the 24 hour air bake.
12	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
14	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
15	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
16	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant plus a 24 hour air bake.



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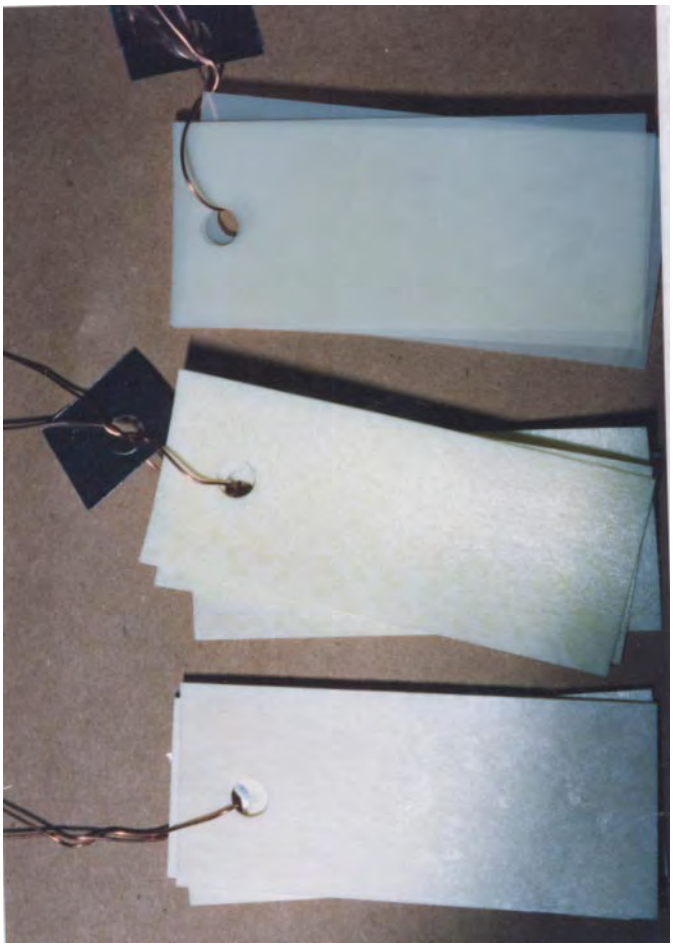

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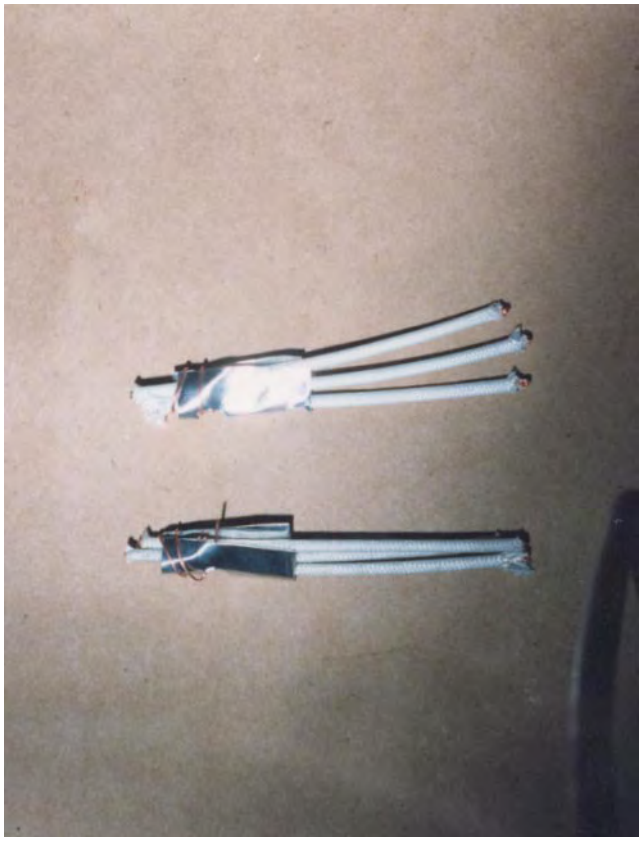
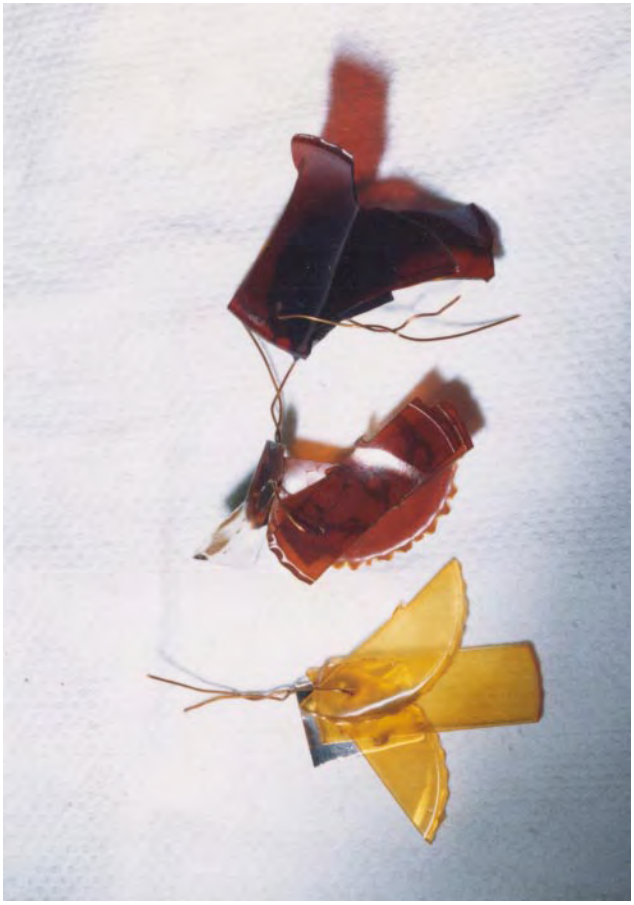
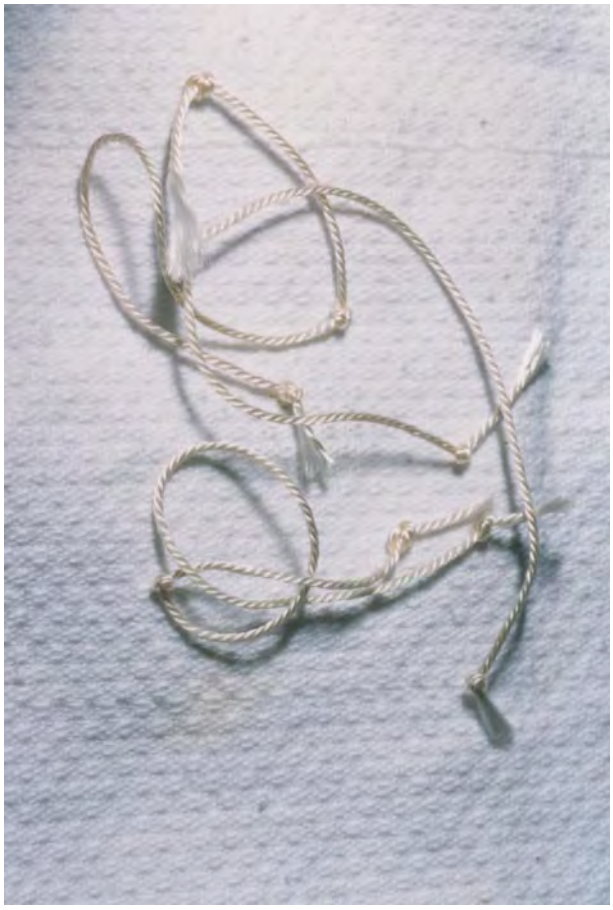
Photograph #7(above)
Photograph #8(below)







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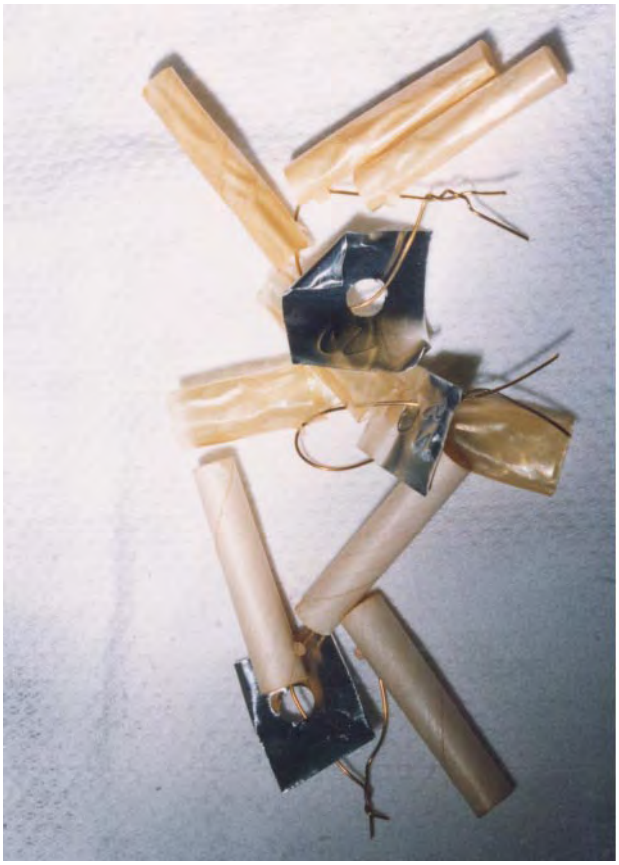
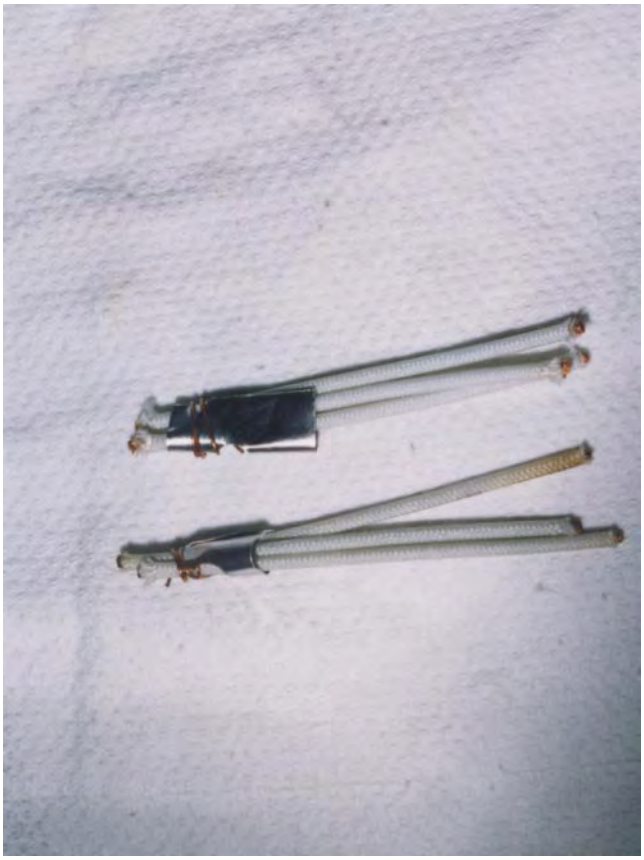
Photograph #10(below)

Photograph #11(above)
Photograph #12(below)



Photograph #13(above)
Photograph #14(below)

Photograph #15(above)
Photograph #16(below)

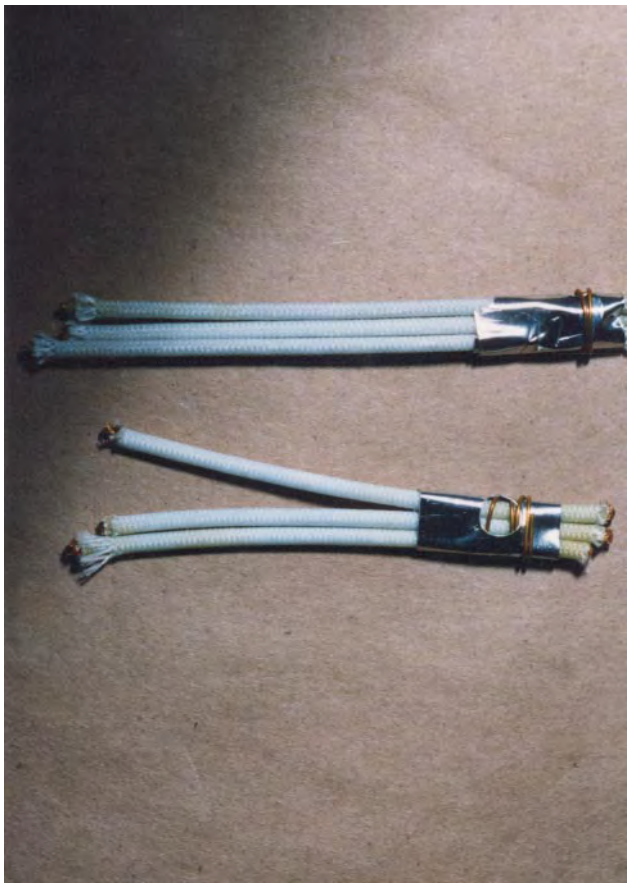


Appendix X

Photographs of Motor Materials after Exposure to HFC-245ca/Emery Iso-32.

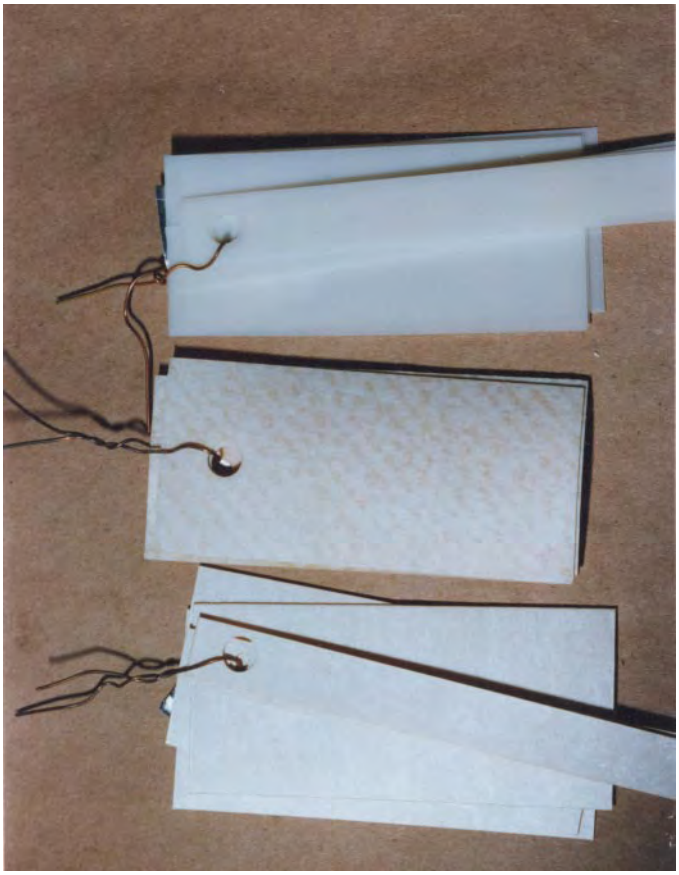
Photograph Identification

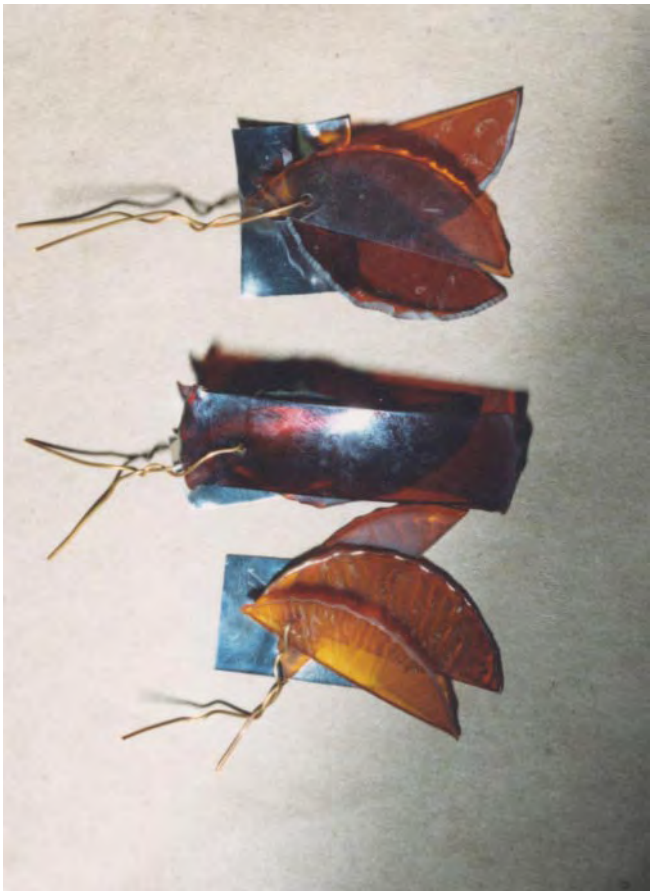
Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
3	Lead wire after 500 hour exposure to refrigerant/lubricant.
4	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant.
5	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant.
6	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
7	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
8	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.



Photograph #1(above)
Photograph #2(below)

Photograph #3(above)
Photograph #4(below)





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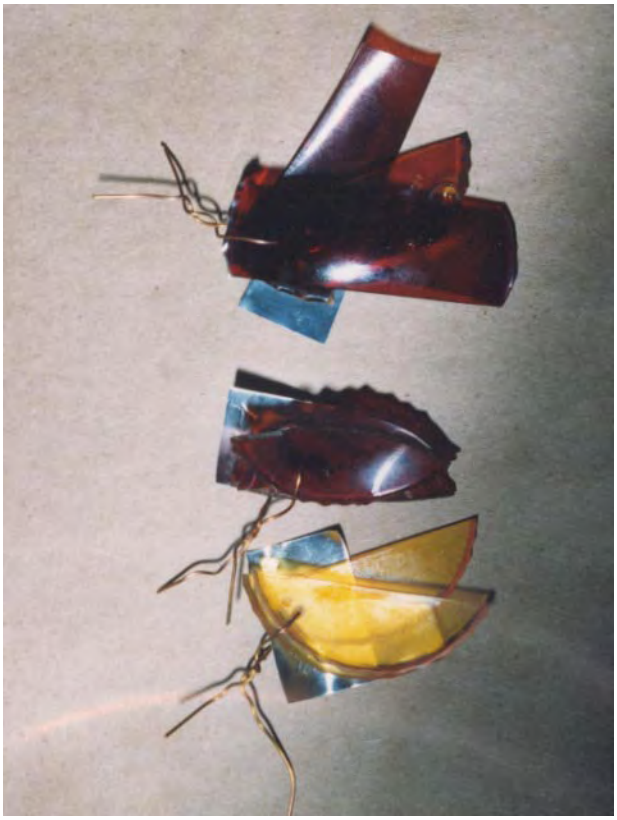
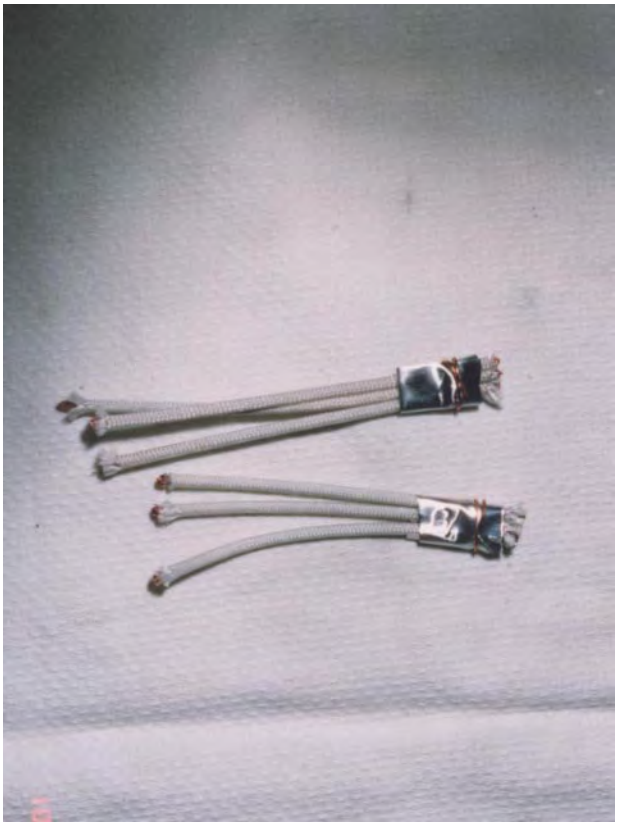
Photograph #7(above)
Photograph #8(below)



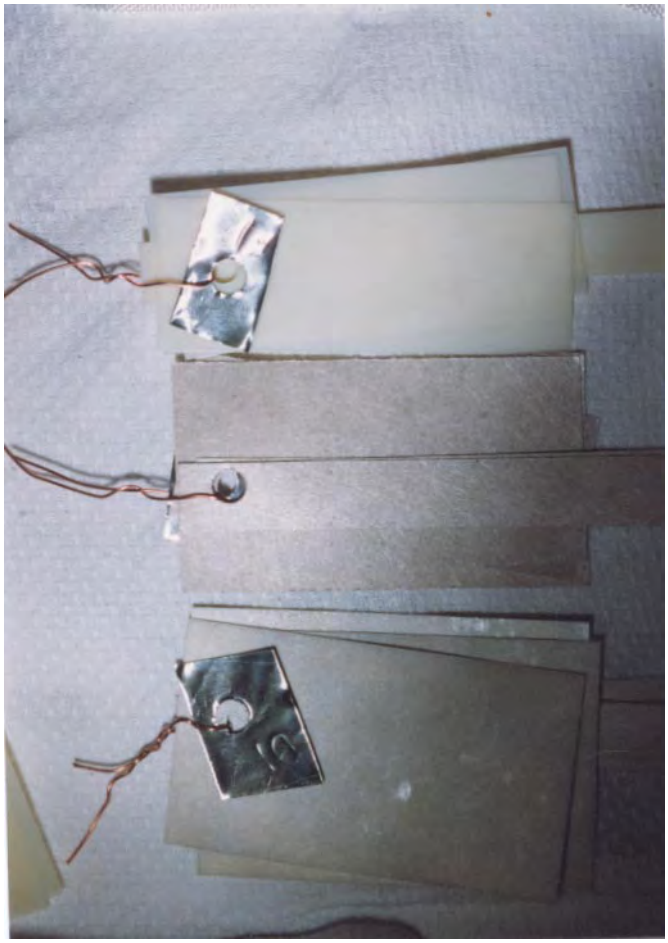


Appendix Y

Photographs of Motor Materials after Exposure to HFC-134a/ICI Emkarox VG32.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Lead wire after 500 hour exposure to refrigerant/lubricant.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant.
9	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
10	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
11	Tested Tie Cords after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
12	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
14	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
15	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
16	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant-lubricant plus a 24 hour air bake.



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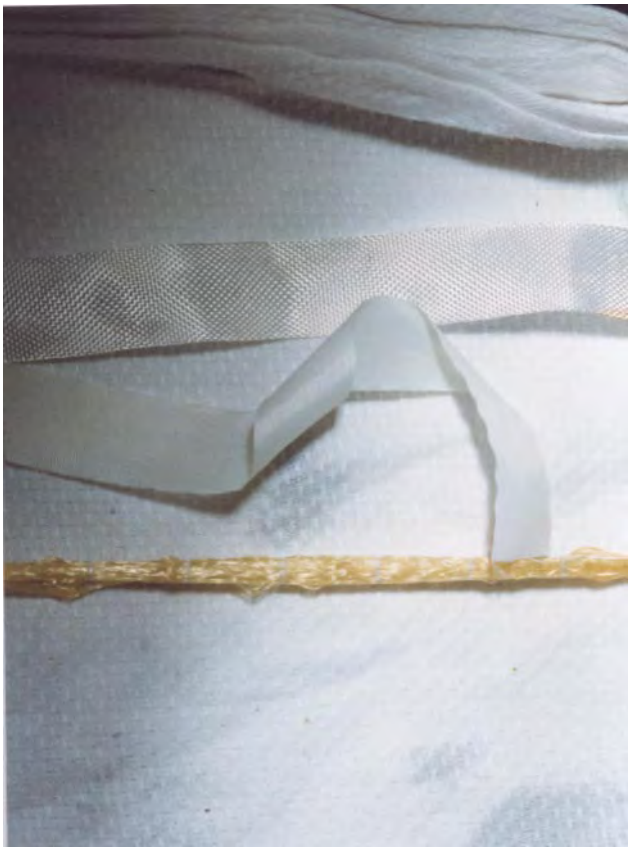
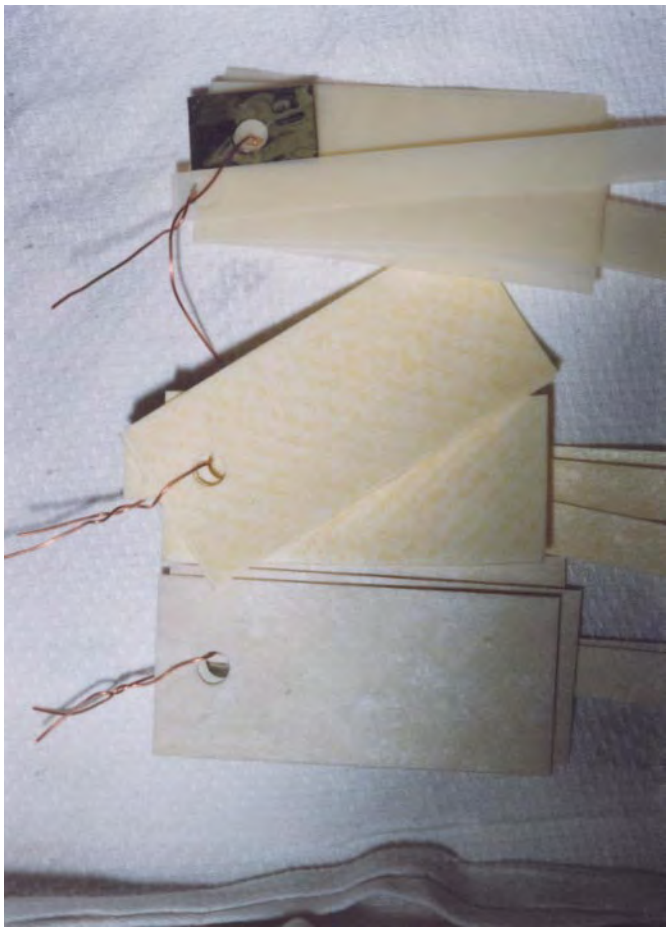
Photograph #4(below)





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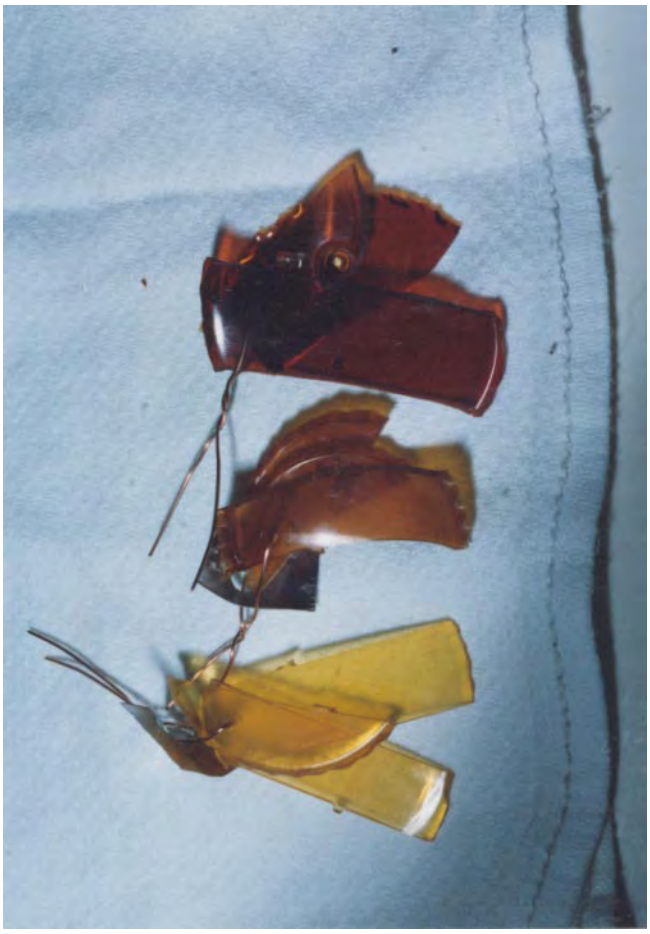

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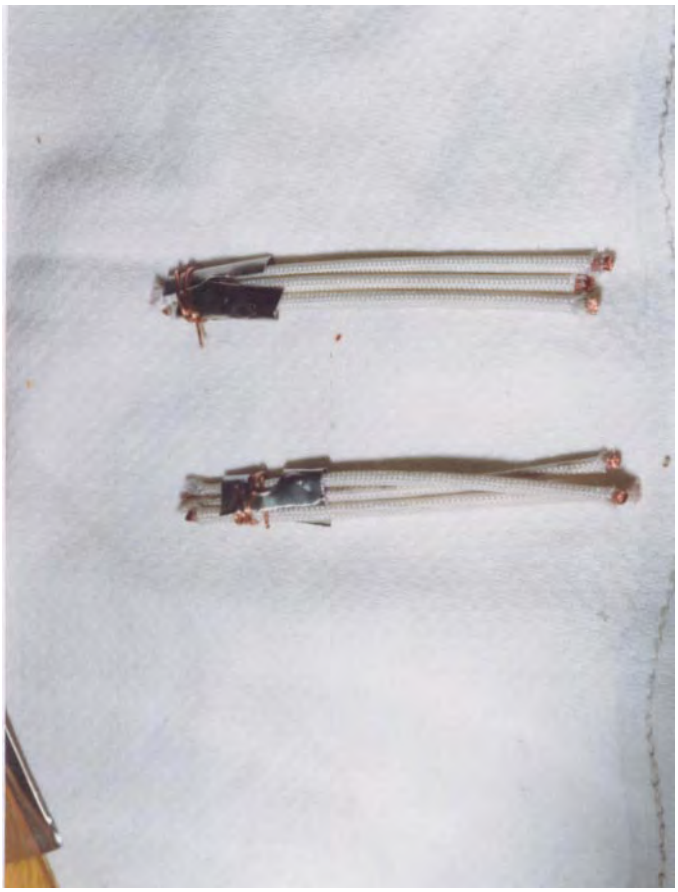

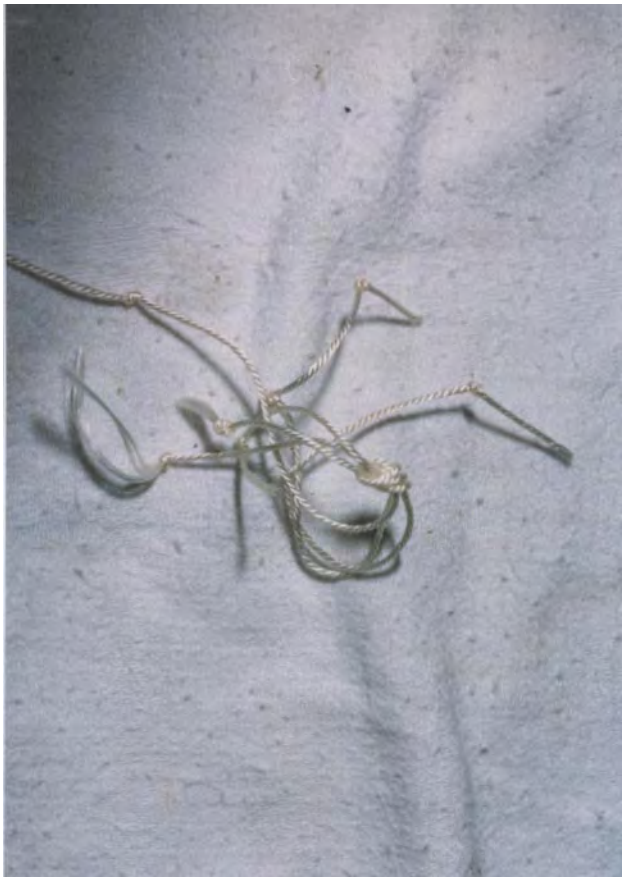

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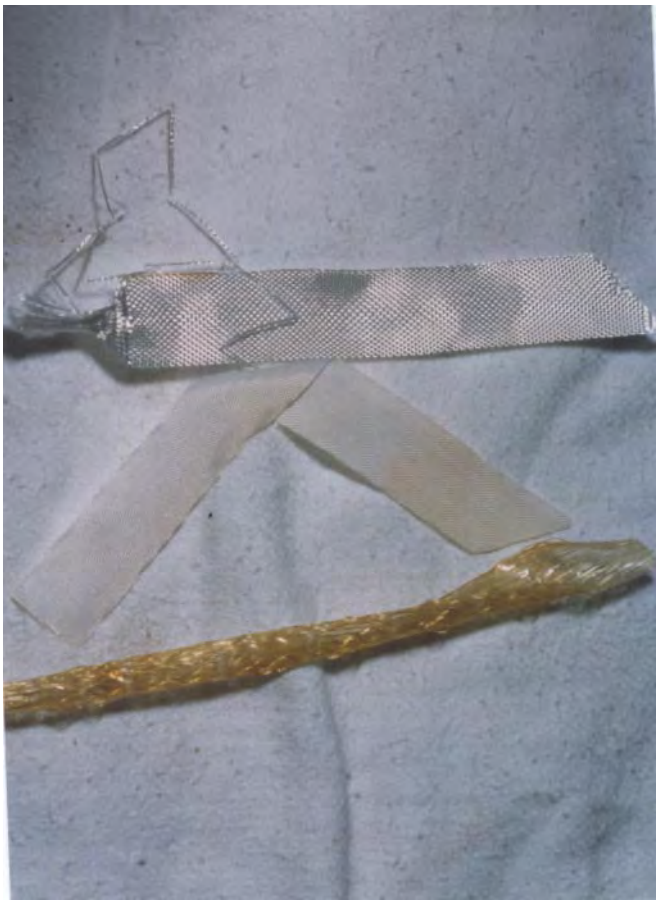

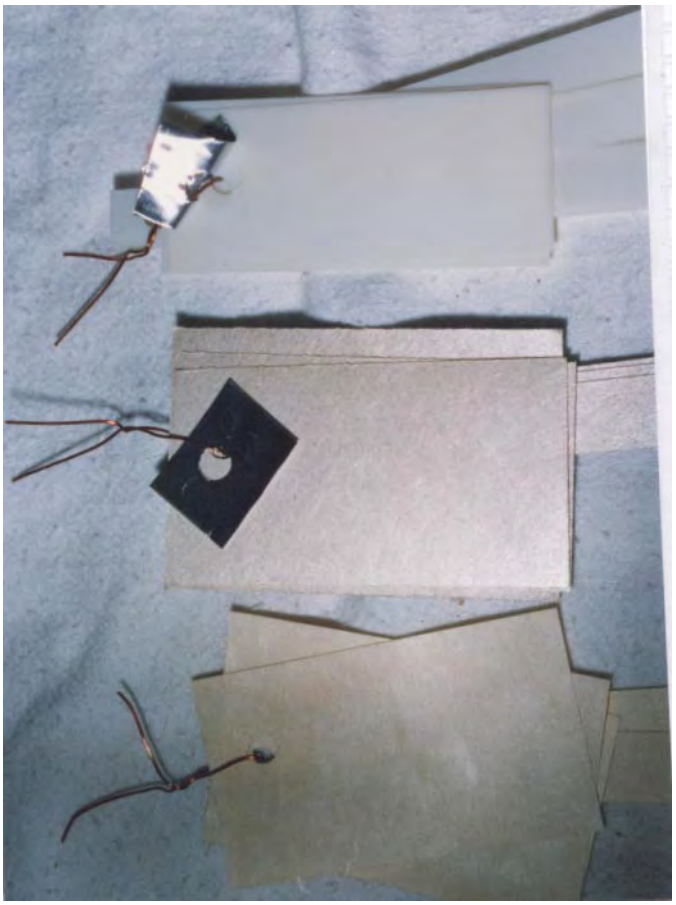

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Photograph #14(below)

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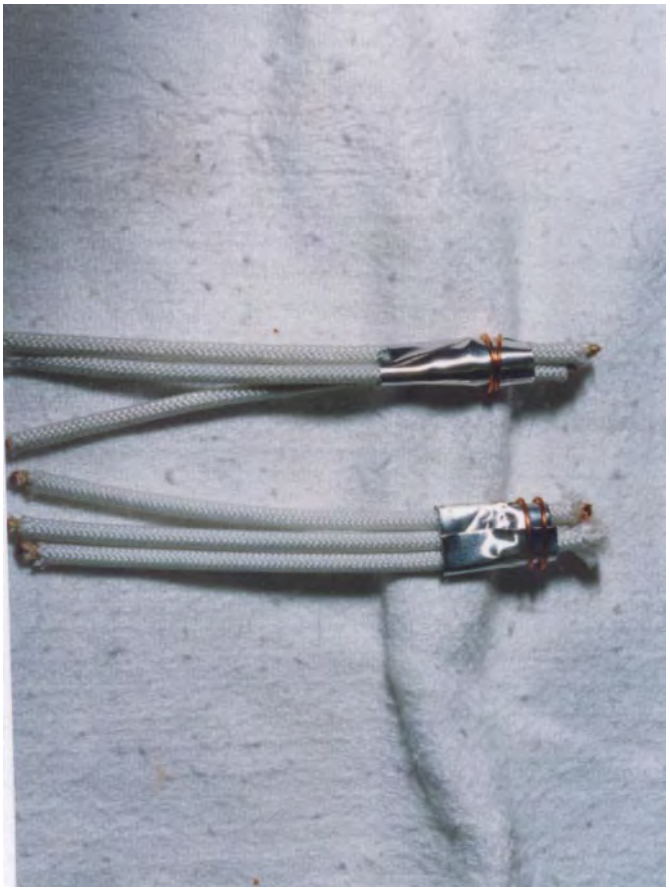
Photograph #16(below)

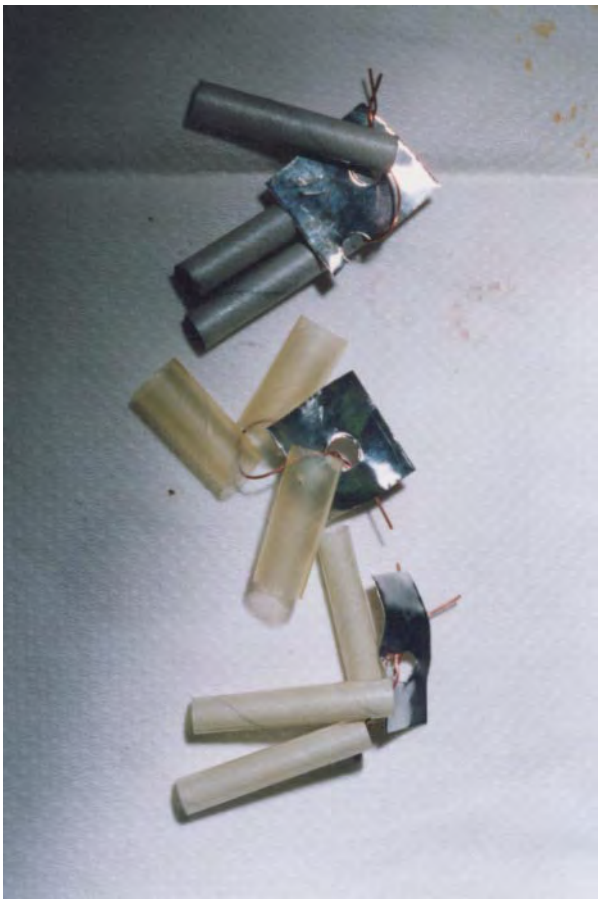


Appendix Z

Photographs of Motor Materials after Exposure to HFC-125/ICI Emkarox VG32.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Lead wire after 500 hour exposure to refrigerant/lubricant.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant.
9	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
10	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
11	Tested Tie Cords after 500 hour exposure to refrigerant lubricant plus the 24 hour air bake.
12	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
14	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
15	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
16	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant plus a 24 hour air bake.



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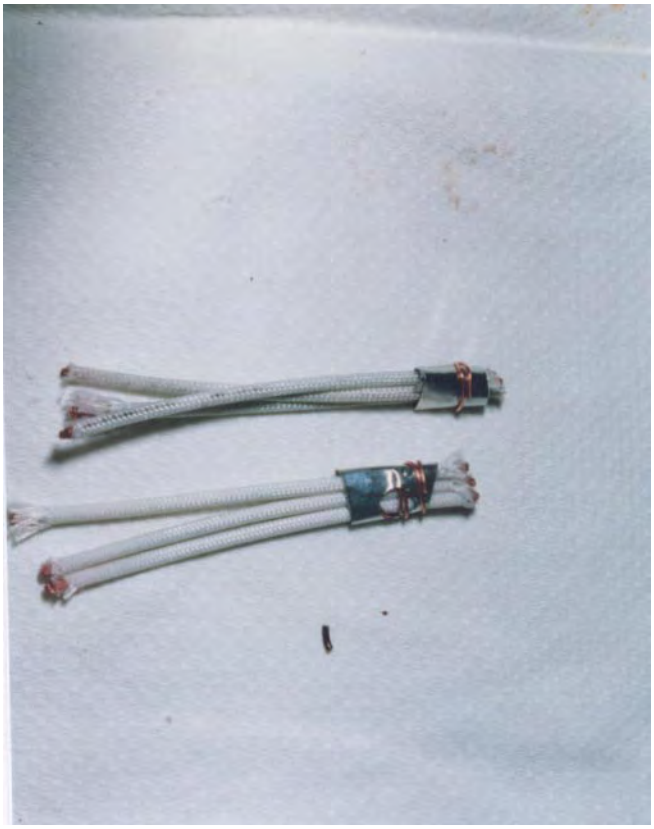
Photograph #3(above)
Photograph #4(below)

Photograph #5(above)

Photograph #7(above)

Photograph #6(below)



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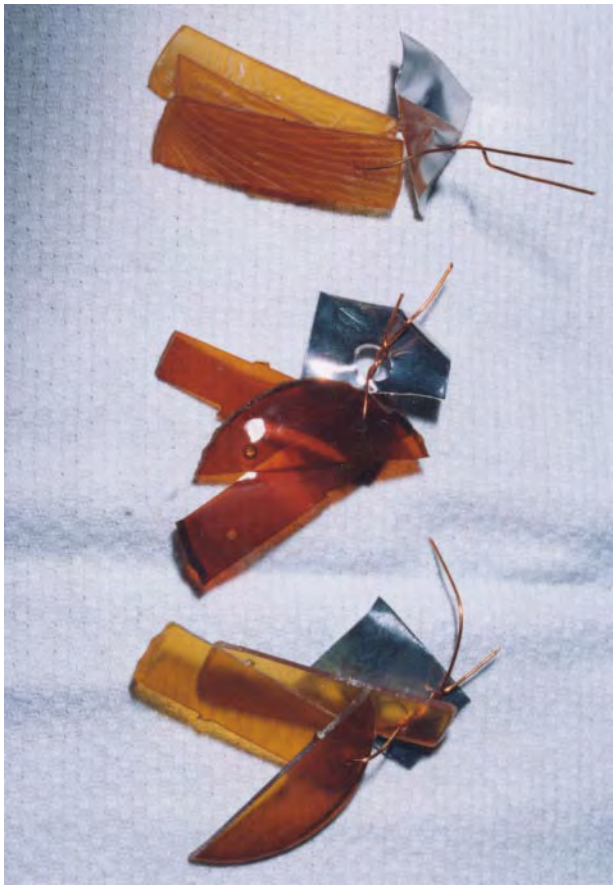
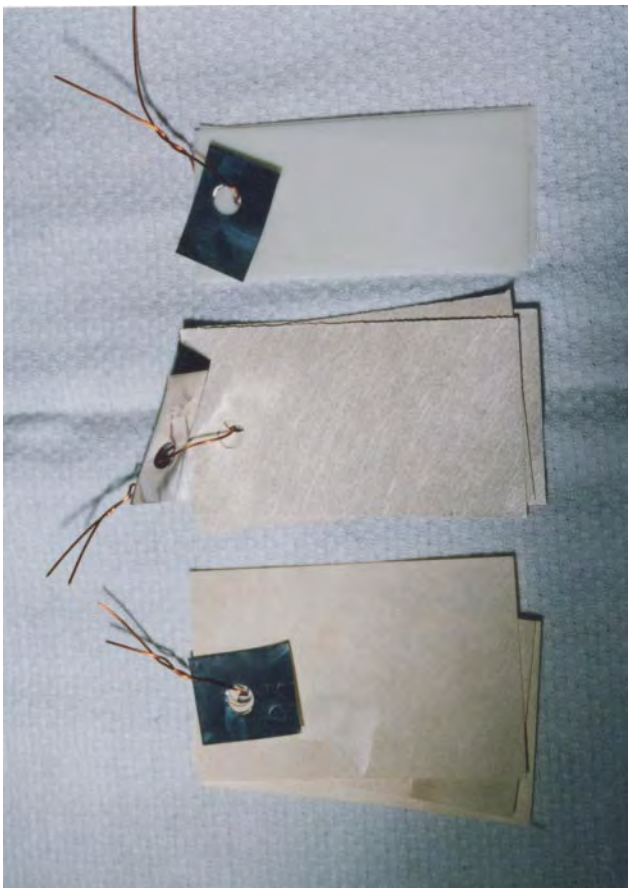
Photograph #9(above)
Photograph #10(below)

Photograph #11(above)
Photograph #12(below)





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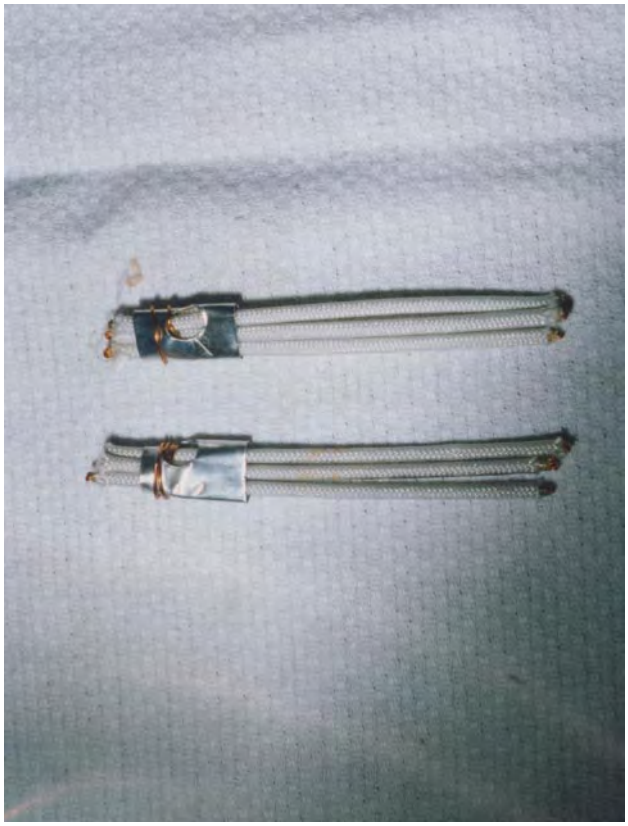
Photograph #15(above)
Photograph #16(below)

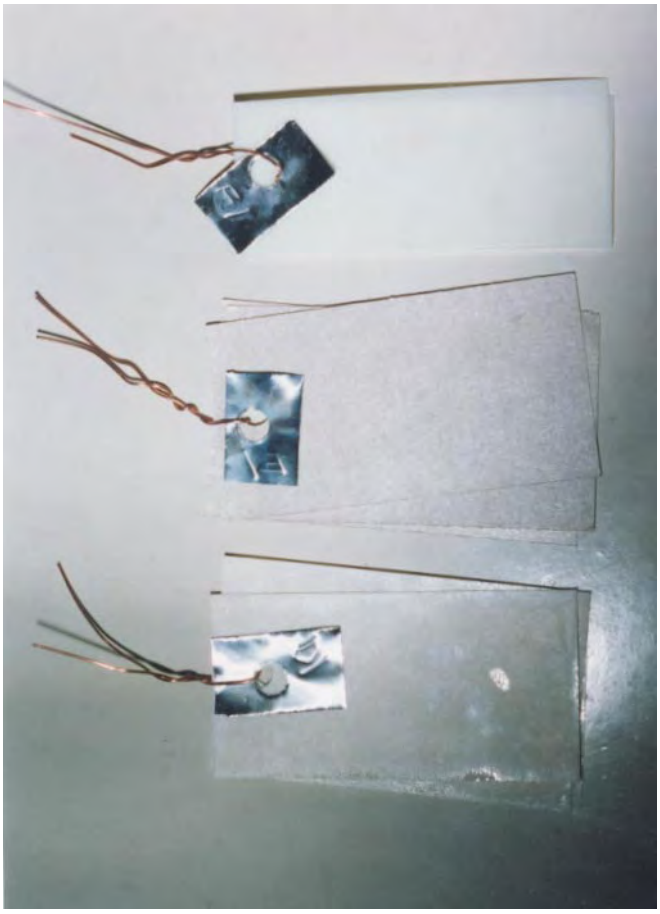


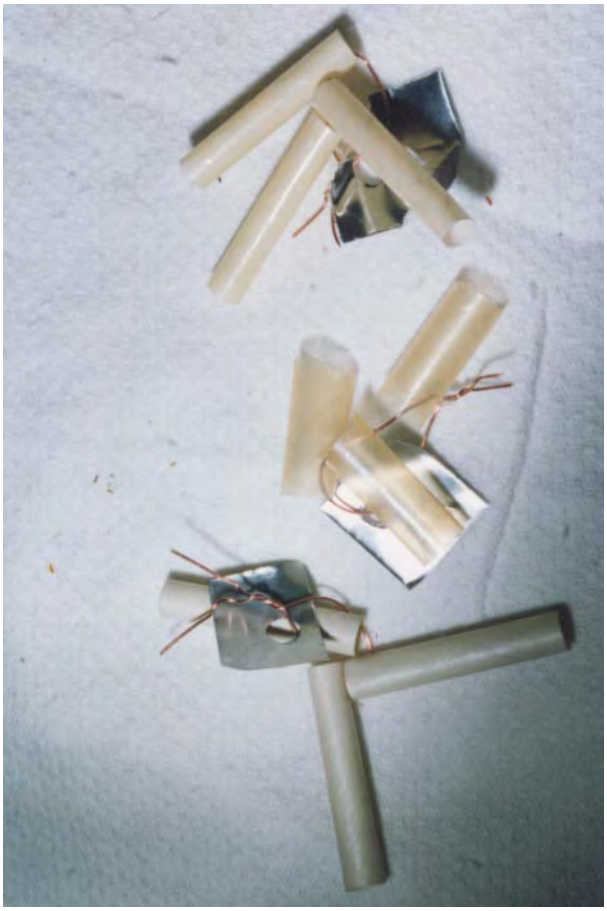
Appendix AA

Photographs of Motor Materials after Exposure to HFC-32/ICI Emkarox VG32.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom). Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Lead wire after 500 hour exposure to refrigerant/lubricant.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant.
9	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
10	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
11	Tested Tie Cords after 500 hour exposure to refrigerant lubricant plus the 24 hour air bake.
12	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
14	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
15	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
16	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant plus a 24 hour air bake.





Photograph #1(above)
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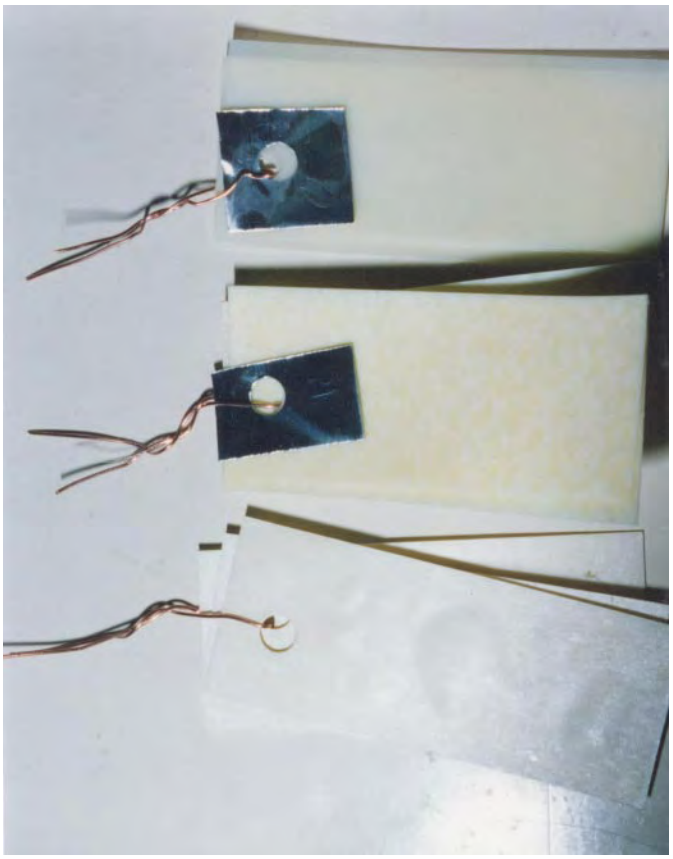
Photograph #3(above)
Photograph #4(below)



Photograph #5(above)
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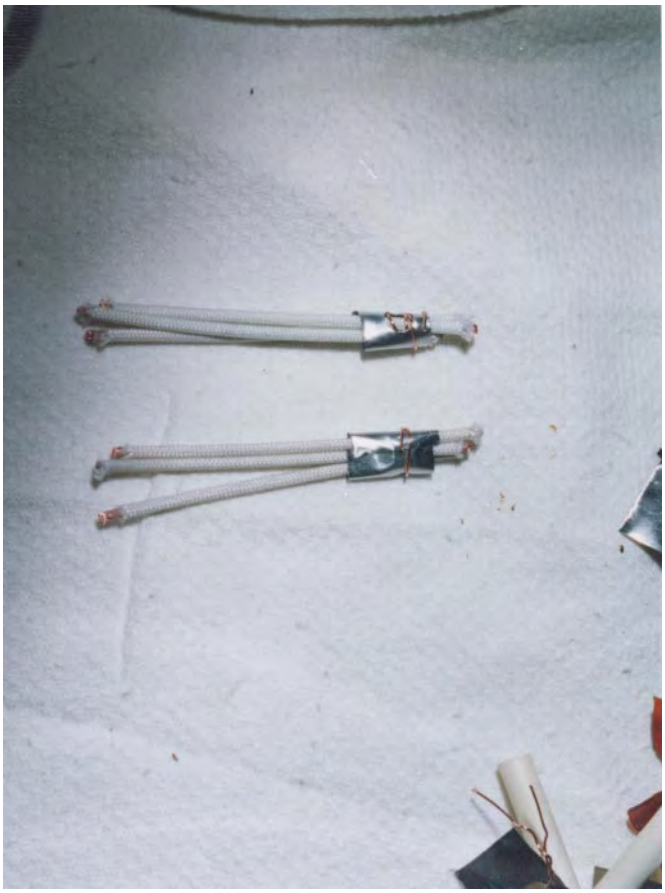
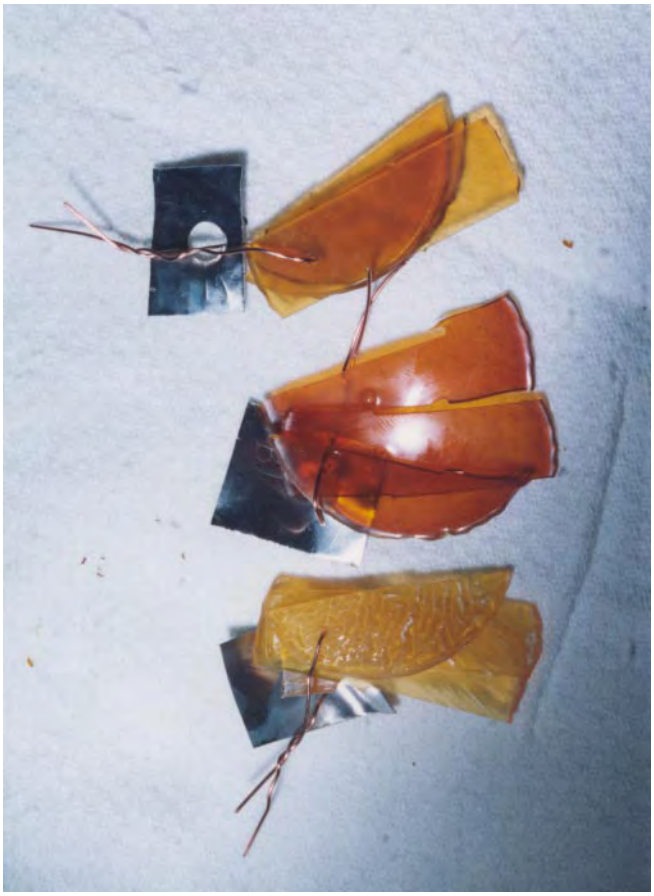
Photograph #7(above)
Photograph #8(below)





Photograph #9(above)
Photograph #10(below)

Photograph #11(above)
Photograph #12(below)

Photograph #13(above)
Photograph #14(below)

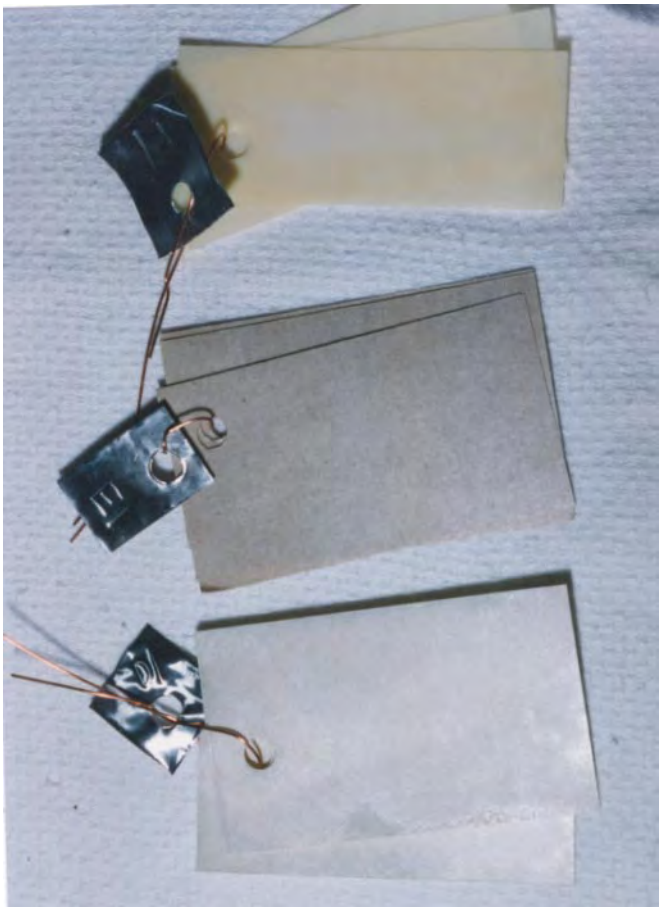
Photograph #15(above)
Photograph #16(below)

Appendix AB

Photographs of Motor Materials after Exposure to HCFC-124/Shrieve Zerol-150

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Lead wire after 500 hour exposure to refrigerant/lubricant.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) Iso-800, 923, Y-833, ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
9	Tested Tie Cords after 500 hour exposure to refrigerant lubricant plus the 24 hour air bake.
10	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
11	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
12	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant plus a 24 hour air bake.



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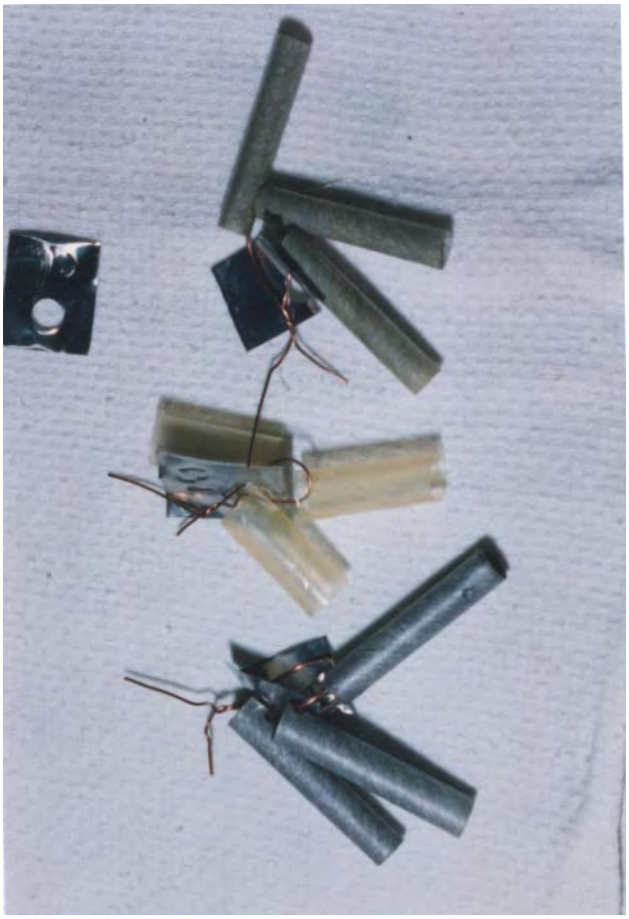

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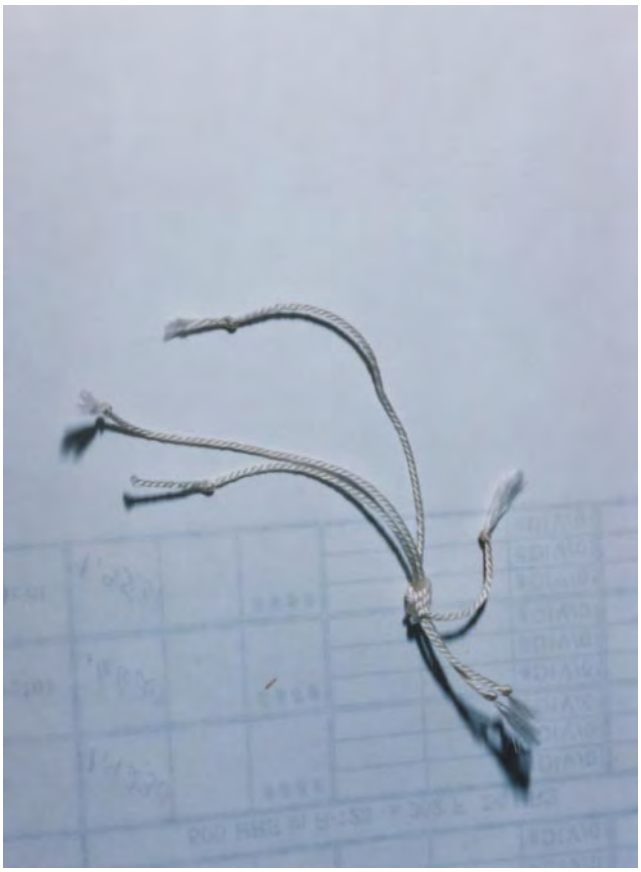

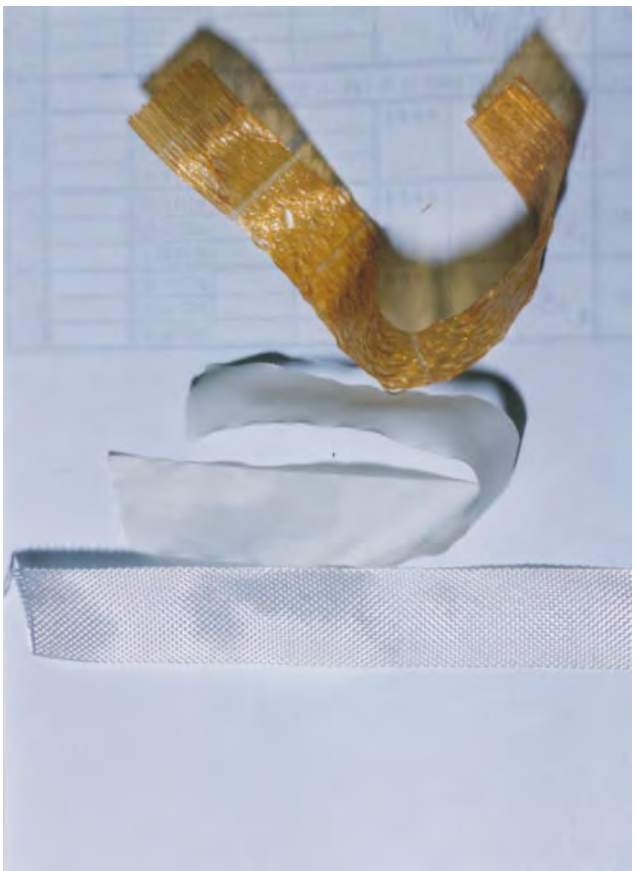

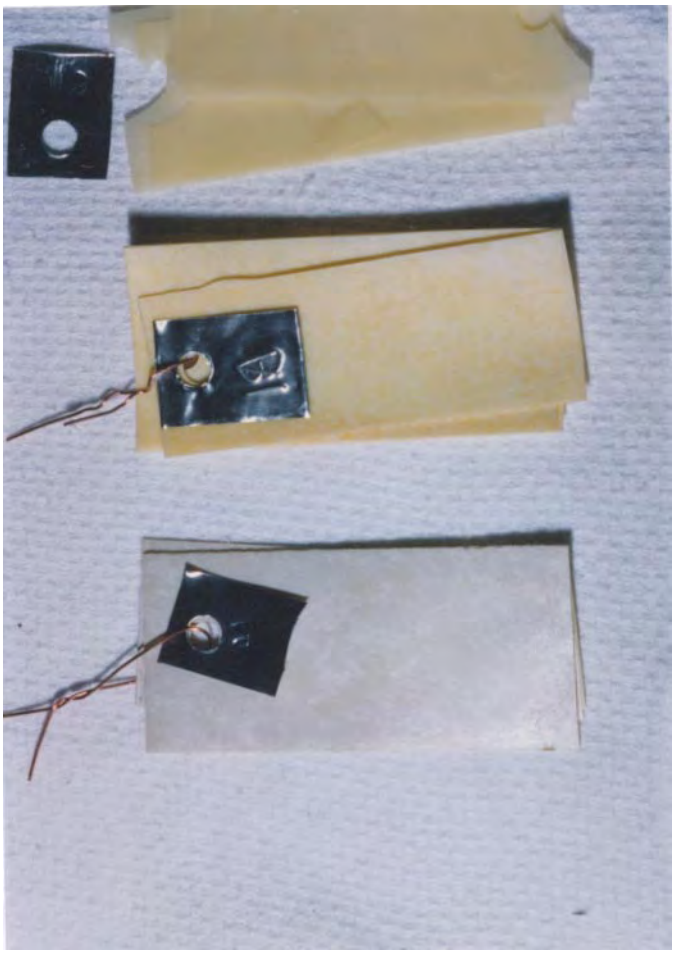

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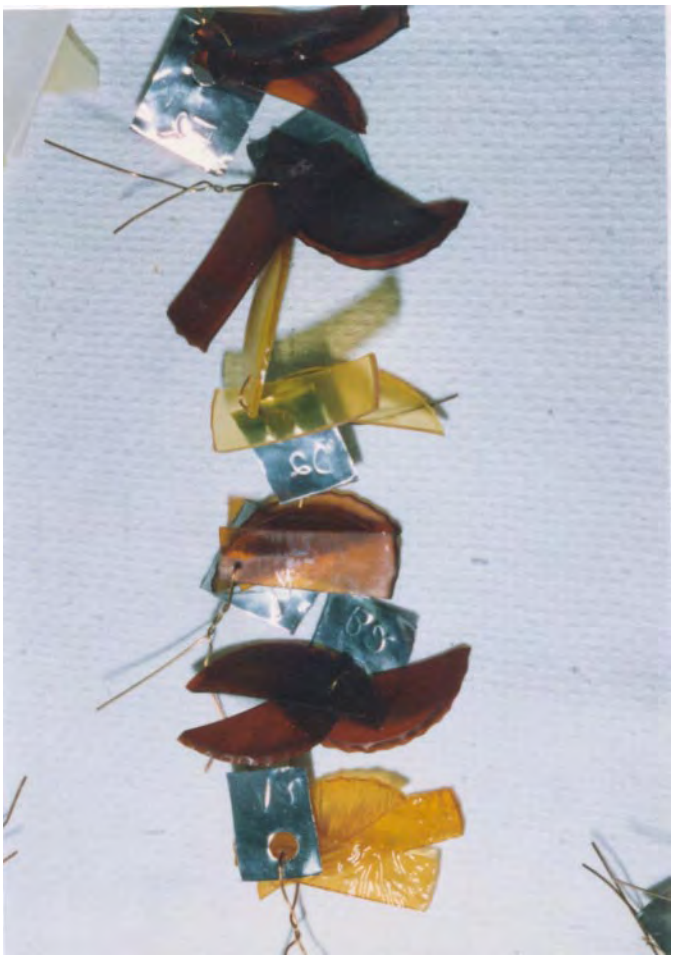
Photograph #6(below)



Photograph #7(above)
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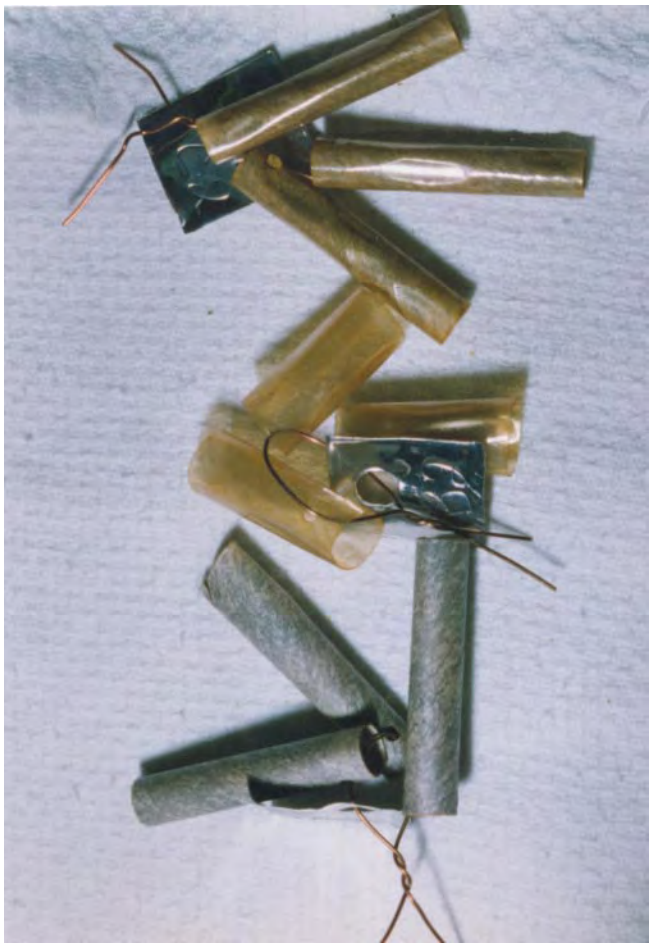
Photograph #9(above)
Photograph #10(below)

Photograph #11(above)
Photograph #12(below)



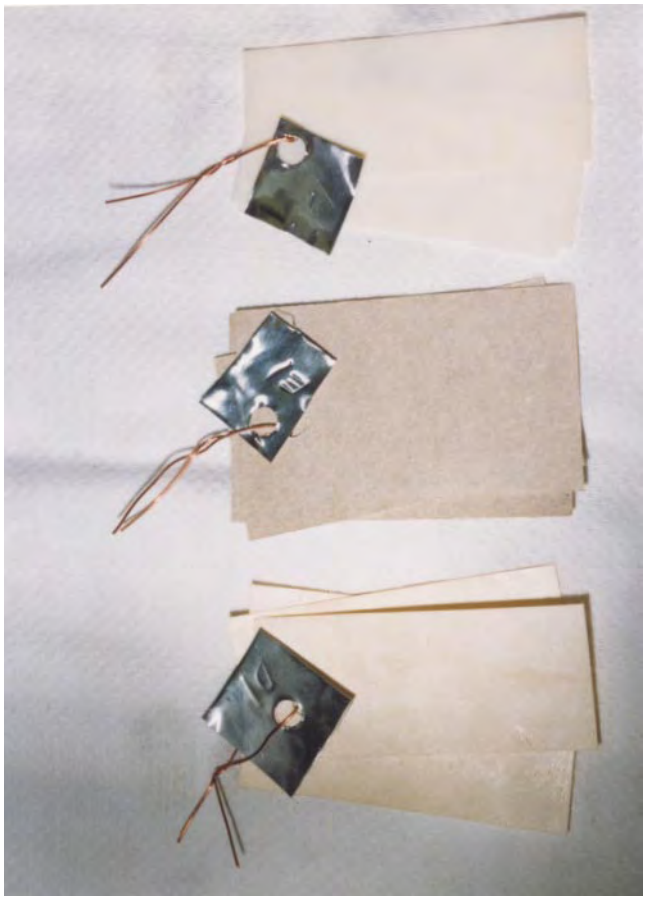
Photograph #13(above)

Appendix AC

Photographs of Motor Materials after Exposure to HFC-134a/Allied Signal BRL-150.

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Lead wire after 500 hour exposure to refrigerant/lubricant.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant.
9	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
10	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
11	Tested Tie Cords after 500 hour exposure to refrigerant lubricant plus the 24 hour air bake.
12	Sleeving(too to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
14	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
15	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
16	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant plus a 24 hour air bake.



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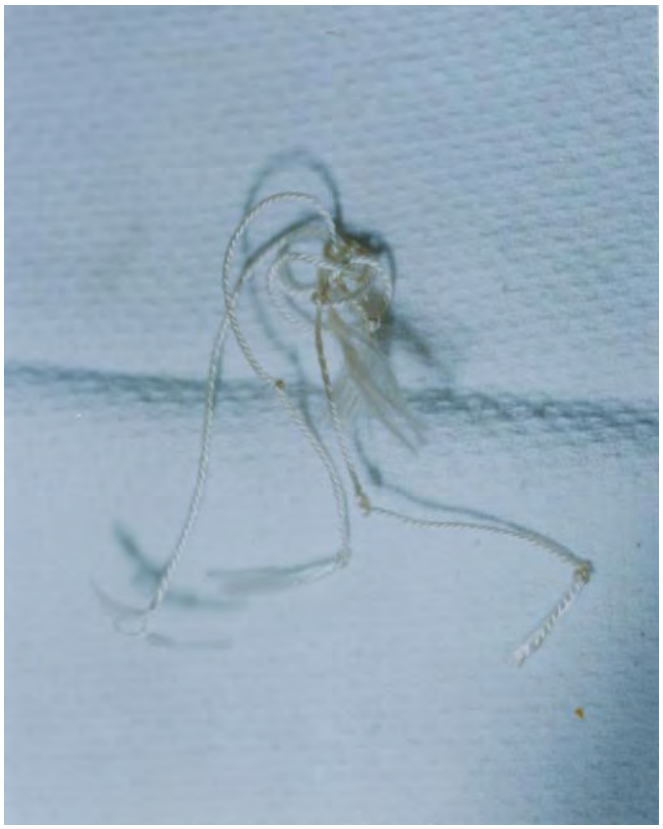
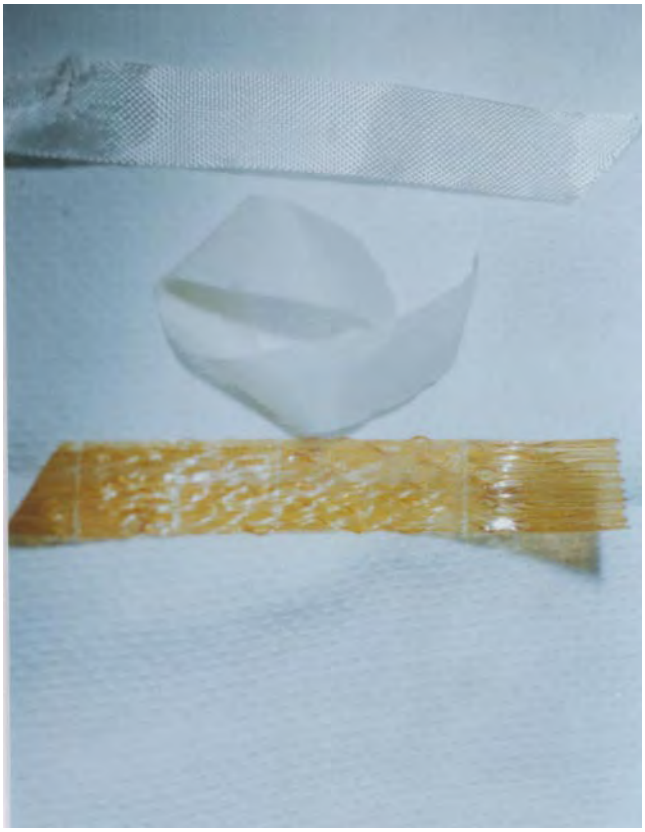
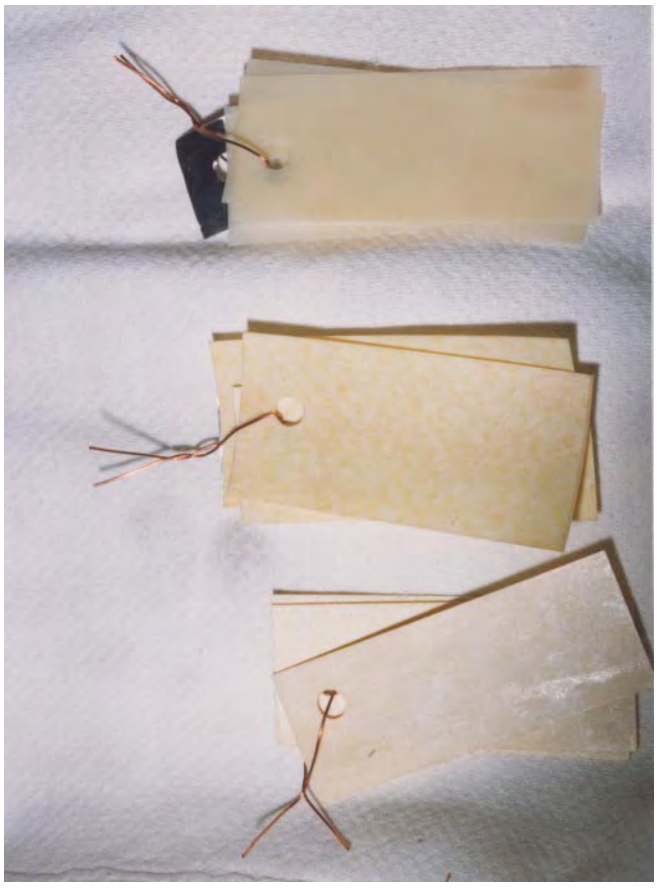
Photograph #3(above)
Photograph #4(below)

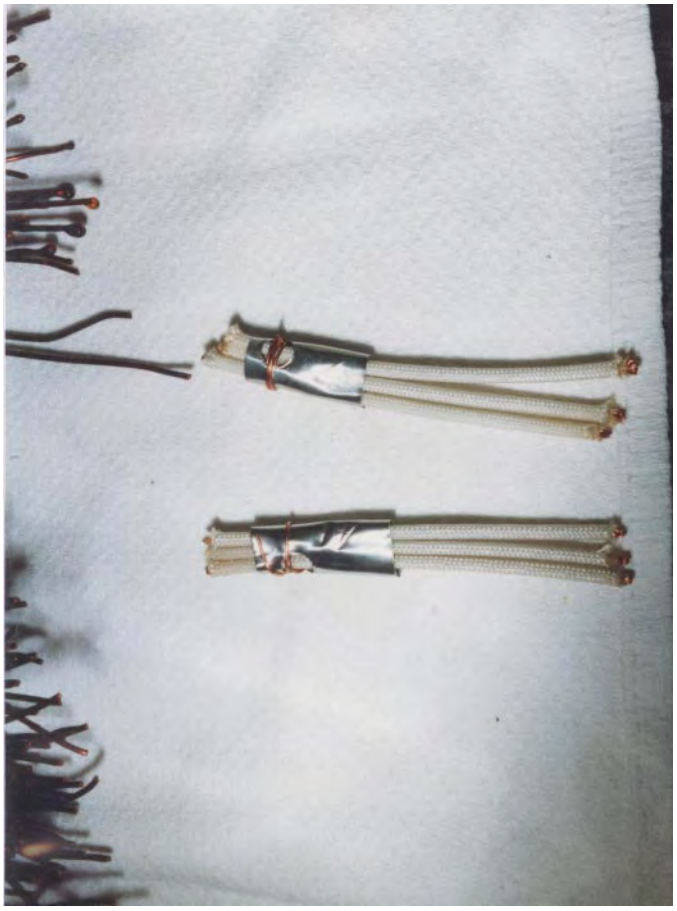


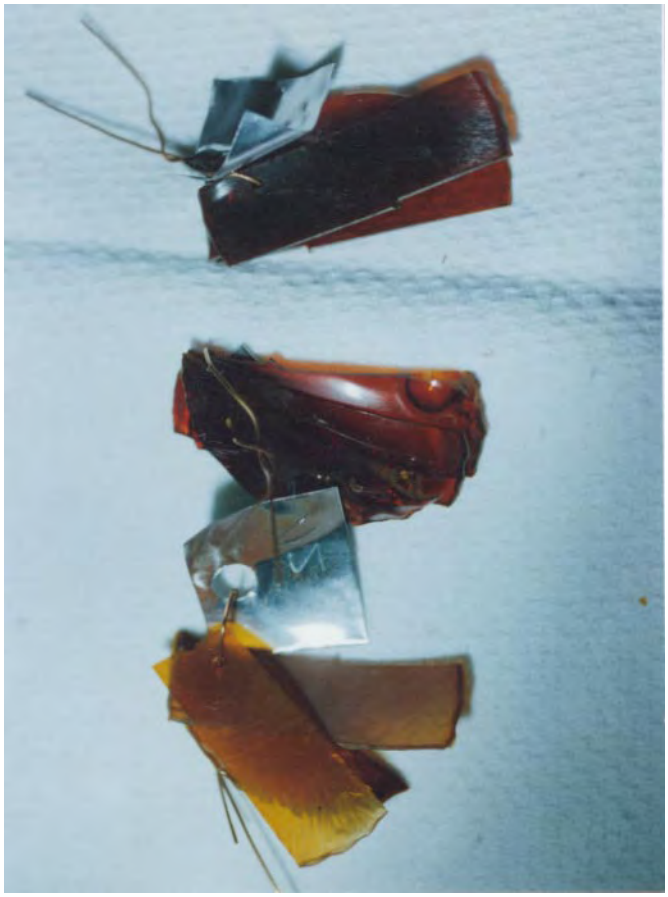




Photograph #5(above)
Photograph #6(below)

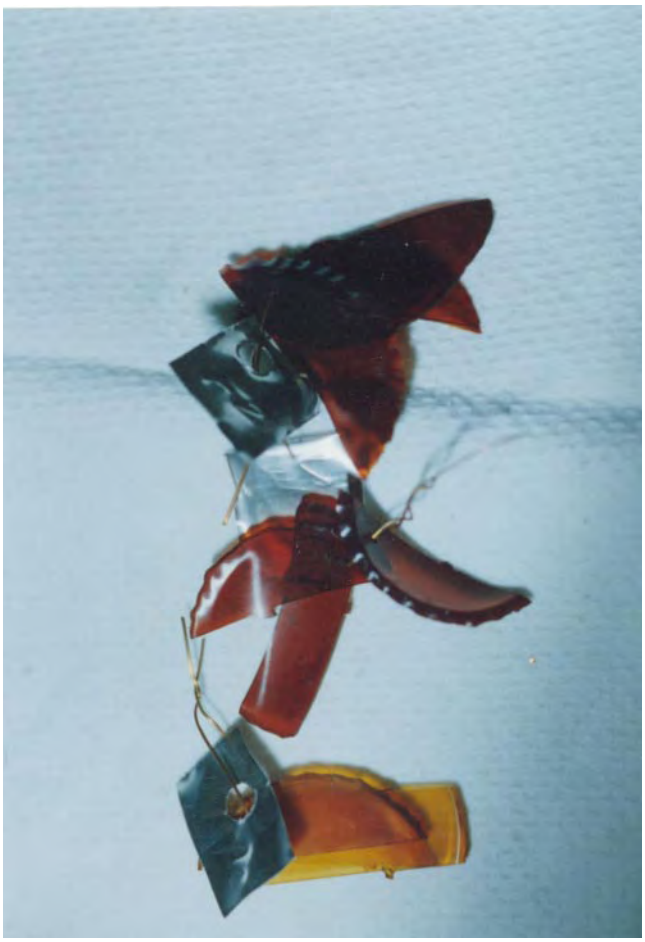
Photograph #7(above)
Photograph #8(below)





Photograph #9(above)
Photograph #10(below)

Photograph #11(above)
Photograph #12(below)



Photograph #13(above)
Photograph #14(below)

Photograph #15(above)
Photograph #16(below)

Appendix AD

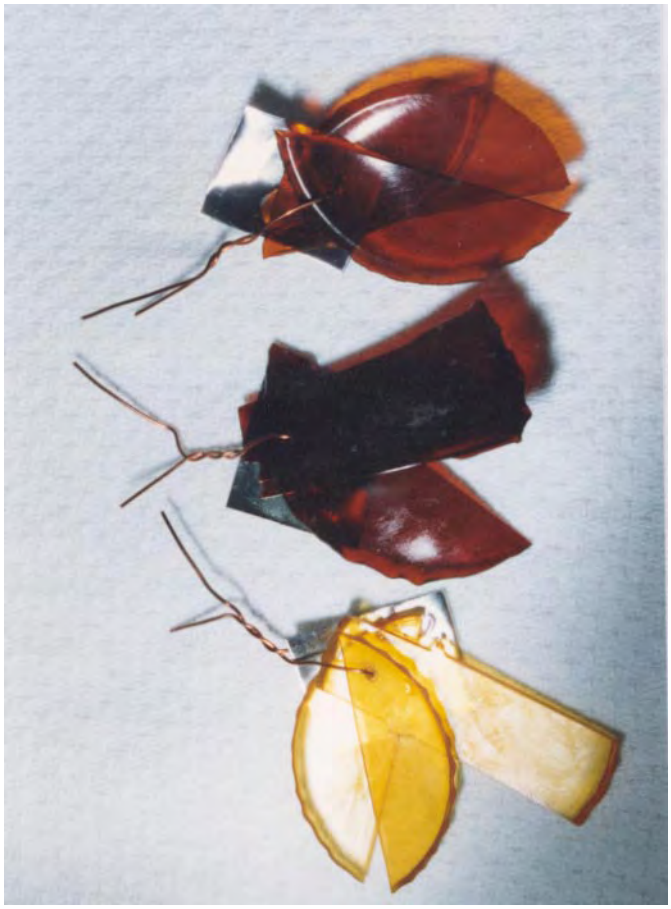
Photographs of Motor Materials after Exposure to HFC-125/Allied Signal BRL-150

Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
2	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
3	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
4	Lead wire after 500 hour exposure to refrigerant/lubricant.
5	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant.
6	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
8	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
9	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
10	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
11	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.

Photograph #1(above)
Photograph #2(below)

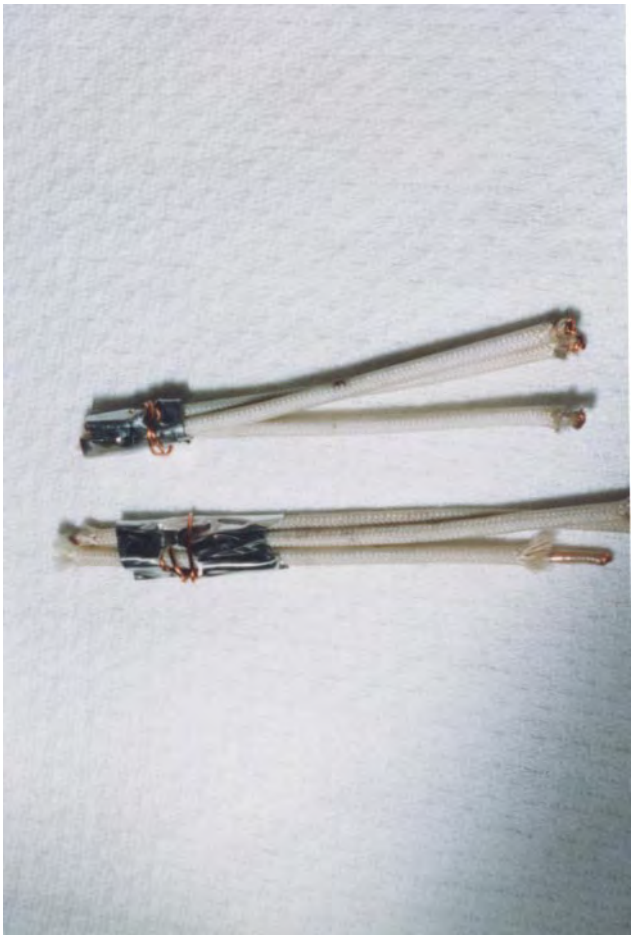
Photograph #3(above)
Photograph #4(below)



Photograph #5(above)
Photograph #6(below)

Photograph #7(above)
Photograph #8(below)

Photograph #9(above)
Photograph #10(below)



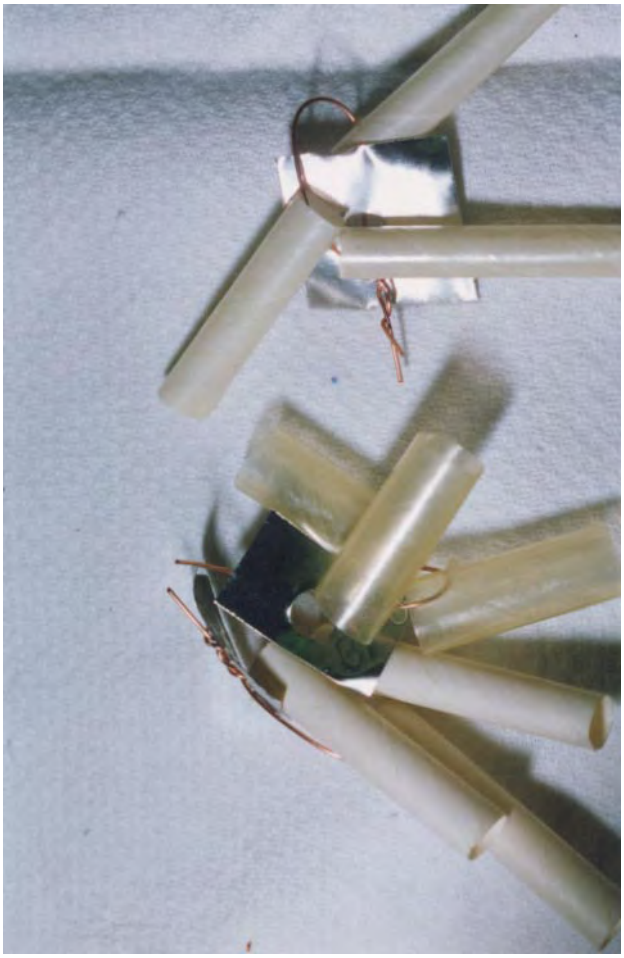
Photograph #11(above)

Appendix AE

Photographs of Motor Materials after Exposure to HFC-134a/Dow P-425.

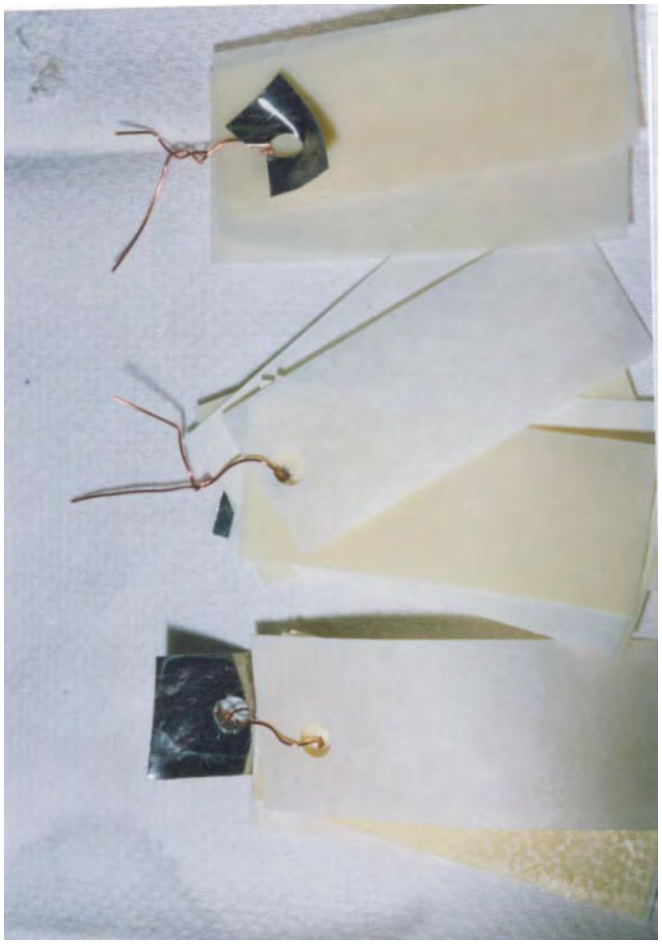
Photograph Identification

Photo #	Description
1	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant
2	Tie cords after 500 hour exposure to refrigerant/lubricant
3	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant/lubricant.
4	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant/lubricant.
5	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant
6	Lead wire after 500 hour exposure to refrigerant/lubricant.
7	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant.
8	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/ lubricant.
9	Varnish Disks(top to bottom) Iso-800, 923, Y-833, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
10	Varnish Disks(top to bottom) ER-610, Y-390, U-475, after 500 hour exposure to refrigerant/lubricant plus the 24 hour air bake.
11	Tested Tie Cords after 500 hour exposure to refrigerant lubricant plus the 24 hour air bake.
12	Sleeving(top to bottom) Nomex/Mylar, Mylar and Nomex after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
13	Tapes(top to bottom) Glass, Polyester and Permacel after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
14	Lead Wires after 500 hour exposure to refrigerant-lubricant plus the 24 hour air bake.
15	Sheet Insulation(top to bottom)Melinex, Nomex-Mica, Nomex, after 500 hour exposure to refrigerant/lubricant plus a 24 hour air bake.
16	Sheet Insulation(top to bottom) Mylar, Dacron/Mylar/Dacron, Nomex/Mylar/Nomex after 500 hour exposure to refrigerant lubricant plus a 24 hour air bake.



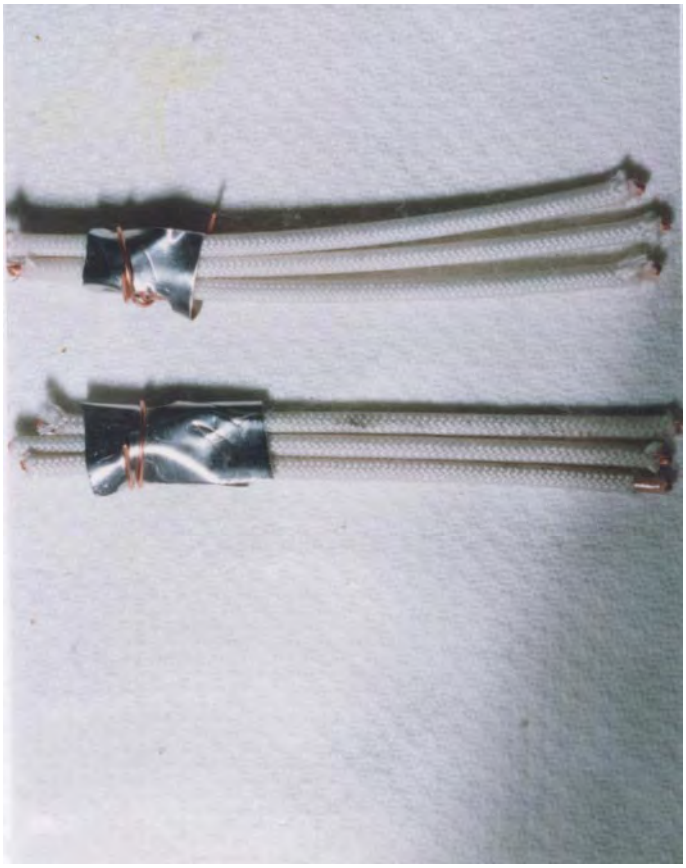
Photograph #1(above)
Photograph #2(below)

Photograph #3(above)
Photograph #4(below)



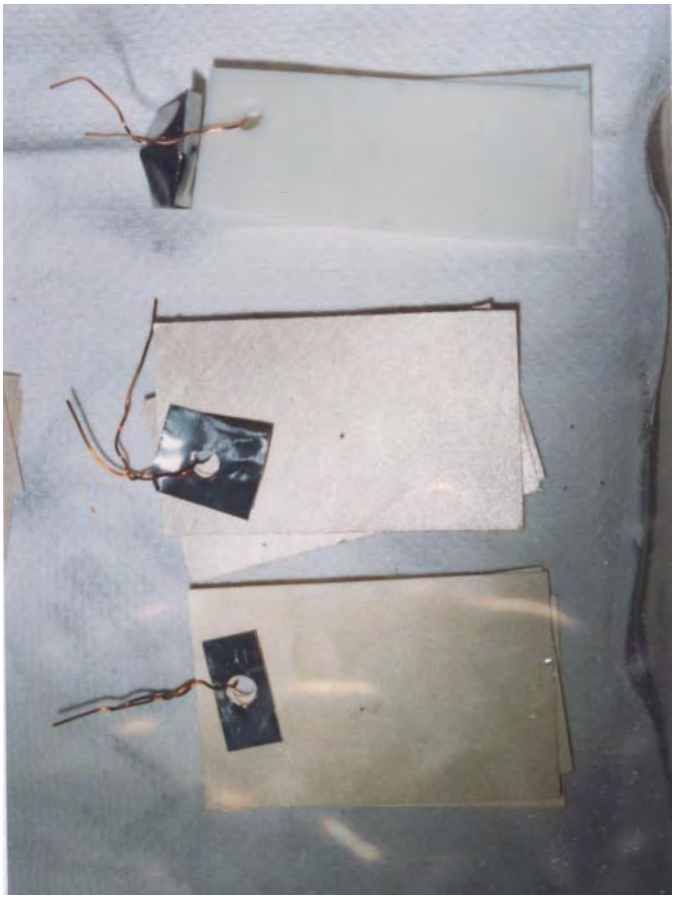
Photograph #5(above)
Photograph #6(below)

Photograph #7(above)
Photograph #8(below)



Photograph #9(above)
Photograph #10(below)

Photograph #11(above)
Photograph #12(below)



Photograph #13(above)
Photograph #14(below)

Photograph #15(above)
Photograph #16(below)