AMI INCORPORATED . 1500 UNION AVENUE, S. E. . GRAND RAPIDS 2, MICHIGAN

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BULLETIN NO. 116

TO: All Distributing Office Service Personnel

SUBJECT: Repair of Cabinet Finishes

When it becomes necessary to re-finish cabinet areas larger than six or seven square inches, it should be done by spraying. The attached chart for Speckle Tone finishing materials explains the mixing ratios and procedures. In general, because of the shelf life limitations, materials should not be ordered from the factory in advance of 30 days before usage.

If the cabinet has been damaged so that gouging of the wood has occurred, the usual filling techniques should be employed, using plastic wood, or similar fillers to make the damaged area flush with the surrounding area. If fillers or inlay patches are used, two coats of primer lacquer should be used instead of the usual one coat.

All traces of the old Rel-Var must be removed from the area to be re-finished. This must be done with fine sandpaper (0-3/0) and steel wool. Dust and carefully mask off the area to be patched.

The primer coat is sprayed on the cabinet in the normal way, using conventional techniques. Normally, one coat only is applied and allowed to air dry at least one hour. If, under special circumstances, two coats of primer are required, one hour minimum drying time between coats must be allowed. The color of the priming lacquer, of course, is determined by the color of the cabinet being repaired.

The spray equipment used for spraying the Speckle Tone (the mixture of the primary, secondary and accent colors) is standard in most respects. The nozzle is special and is a Binks #53PB. The average tank pressure is 15 psi and the atomizing pressure 42 psi. These are varied by the operator to suit the age, temperature of the mixture, etc., the governing factor being the results obtained on the surface being sprayed. For small spray equipment (gun and tank attached), the normal agitation in handling the gun and paint container is sufficient to keep the paint mixture thoroughly mixed. For large equipment where the paint tank is separate from the gun, motor driven agitation must be used to keep the paint particles in suspension. Generally speaking, the agitator speed required will be in the range of 40 to 100 rpm depending upon the temperature of the mixture. Insufficient agitator speed will not give adequate suspension of the particles, while too much agitation will break up the particles and cause them to dissolve into the solution.

The equipment used for spraying the gold flitter is basically the same as that used for Speckle Tone; however, the nozzle should be changed to a Binks #68PB. Should it be impossible to locate the #68PB nozzle, application of the flitter is possible with a #53PB nozzle but the pattern will not be as even and some difficulty will be experienced with the particles clogging the nozzle and gun.

The flitter is applied with the tank pressure set at 20 - 25 psi and an atomizing pressure of 80 psi. The agitator should be operating within the range of 40 - 100 rpm.

Application of the flitter <u>must</u> be <u>made immediately</u> while the Speckle Tone is still in a very "wet" condition. The spray gun should be held approximately 24 - 36 inches from the area to be covered, while making a very fast "pass" and allowing the flitter to "drift" on the cabinet.

This coat will dry sufficiently for further finishing in about four hours. This can be accelerated to about one half hour by oven drying. The temperature used is 90° - 100° F. with a relative humidity of approximately 35%.

The final coat, or Rel-Var finish, is sprayed over the Speckle Tone by conventional methods. One coat only is used and it will air dry to sufficient hardness for further handling in four to six hours. The drying time can be accelerated to a maximum of 90 minutes by oven drying at a temperature of 130° to 140° F. with a relative humidity of approximately 35%. The Rel-Var continues to harden so that ten days to two weeks after spraying, its surface is tough enough to resist acetone, alcohol, reasonable abrasion, cigarette burns and similar abuse. When kept separately, the Rel-Var and its catalyst have unlimited shelf life. Once mixed, the shelf life of the mixture is from three to seven days.

It is suggested that finishing materials not be mixed until the actual spraying is to proceed and then only in quantities sufficient for the job on hand. Mixing instructions and order quantity information are given on the enclosed chart of Speckle Tone finishing materials.

APPLICATIONS INGINEERING

Encl: Chart of Speckle Tone Finishing Materials

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## FINISHING MATERIALS

Due to the ages of the individual colors, variations in batches, the distance that the gun is held from the work, temperature, etc., the mixtures given below are approximate. The exact mixture required for a given job must be determined by comparing results obtained with trial mixtures to the desired finish such as a standard sample, or the surrounding area finish if patching is being done.

Listed below, under the headings of cabinet colors, are the materials required for each particular color. The field color, secondary color and accent color are to be mixed together in the proportions shown, subject to the comments above. The primer is, of course, not mixed with these, nor is the Rel-Var. Before the Rel-Var is used, the catalyst is mixed with it in the proportion shown.

Material required to refinish one phonograph cabinet:

CARTNET COLOR

| CABINET COLOR   |  | MIXTURE S                                    |  |
|---|--|--|--|
| Delft Blue  |  |  |  |
| Blue Primer Blue Field Yellow Tint Primer Yellow Tint Field Gold Flitter + Rel-Var + Catalyst     | #4224<br>#4214<br>#3970<br>#3975<br>#F-5355<br>#B-5875<br>#12556 | 2 Quarts 2 " 1 Pint 1 " 2 Quarts 1 Ounce     |  |
| Yellow Primer Yellow Field Yellow Tint Primer Yellow Tint Field Gold Flitter + Rel-Var + Catalyst | #4218<br>#4211<br>#3970<br>#3975<br>#F-5355<br>#B-5875<br>#12556 | 2 Quarts 2 " 1 Pint 1 " 1 " 2 Quarts 1 Ounce |  |
| Chartruese Green  |  |  |  |
| Green Primer Green Field Yellow Tint Primer Yellow Tint Field Gold Flitter + Rel-Var + Catalyst   | #4217<br>#4212<br>#3970<br>#3975<br>#F-5355<br>#B-5875<br>#12556 | 2 Quarts 2 " 1 Pint 1 " 1 " 2 Quarts 1 Ounce |  |
| Night-Sky Black   |  |  |  |
| Black Primer Black Field Yellow Tint Primer Yellow Tint Field Gold Flitter + Rel-Var + Catalyst   | #3549<br>#3810<br>#3970<br>#3975<br>#F-5355<br>#B-5875<br>#12556 | 2 Quarts 2 " 1 Pint 1 " 1 " 2 Quarts 1 Ounce |  |

### CABIMLT COLOR

#### MIXTURE SIZE

## Bright Sand

| Yellow Tint Primer<br>Yellow Tint Field | #3970<br>#3975 | 2-1/2 Quarts<br>2-1/2 " |
|---|----------------|-------------------------|
| Gold Flitter                            | #F-5355        | 1 Pint                  |
| + Rel-Var                               | #B-5875        | 2 Quarts                |
| + Catalyst                              | #12556         | 1 Ounce                 |

## Cherry Red

| Red Primer         | 1/4222         | 2 Quarts     |
|--------------------|----------------|--------------|
| * Red Field        | <i>f</i> 14213 | 2 "          |
| * Grey Secondary   | #3809          | 1-1/2 Ounces |
| * Black Accent     | <i>(</i> 3810  | 2 Ounces     |
| Yellow Tint Primer | #3970          | 1 Pint       |
| Yellow Tint Field  | 1'3975         | 1 "          |
| Gold Flitter       | /F-5355        | 1/2 Pint     |
| + Rel-Var          | /B-5875        | 2 Quarts     |
| + Catalyst         | #12556         | 1 Ounce      |
|                    |                |              |

# Atoll Coral

| Coral Primer * Coral Field * White Secondary | ∜3807<br>∜3796A<br>∜3808 | 2 Quarts<br>2 "<br>3 Ounces |
|--|--------------------------|-----------------------------|
| * Black Accent                               | //3810                   | 5 11                        |
| Yellow Tint Primer                           | #3970                    | 1 Pint                      |
| Yellow Tint Field                            | #3975                    | 1 "                         |
| + Rel-Var                                    | /B-5875                  | 2 Quarts                    |
| + Catalyst                                   | #12556                   | 1 Ounce                     |
|  |                          |                             |

# Emberred Charcoal

| Charcoal Primer    | <b>#3819</b> | 2 Quarts |
|--------------------|--------------|----------|
| * Charcoal Field   | #3815        | 2 "      |
| * White Secondary  | : 3808       | 4 Ounces |
| * Coral Accent     | #3816        | 2 "      |
| Yellow Tint Primer | //3970       | 1 Pint   |
| Yellow Tint Field  | (3975        | 1 "      |
| Gold Flitter       | /'F-5355     | 1/2 Pint |
| + Rel-Var          | #B-5975      | 2 Quarts |
| + Catalyst         | #12556       | 1 Ounce  |

- \* To be mixed together.
- + To be mixed together.