**PLATING, BRIGHT OR LOW GLOSS DECORATIVE OVER ZINC ALLOY - INTERIOR** **WSB-M1P77-B1**

**PLATING, BRIGHT OR LOW GLOSS DECORATIVE OVER ZINC ALLOY - GENERAL EXTERIOR** **WSB-M1P77-B2**

**PLATING, BRIGHT OR LOW GLOSS DECORATIVE OVER ZINC ALLOY - SPECIAL EXTERIOR** **WSB-M1P77-B3**

**PLATING, BRIGHT OR LOW GLOSS DECORATIVE OVER ZINC ALLOY - SPECIAL EXTERIOR** **WSB-M1P77-B4**

## 1. SCOPE

These specifications define performance requirements for finished coatings of electrodeposited copper, nickel, and chromium for the decoration and protection of zinc alloy surfaces.

## 2. APPLICATION

These specifications were released originally where a bright or low gloss decorative and protective metallic finish is required on zinc alloy surfaces. Four levels of performance are defined as follows:

| | |
|---|---|
| WSB-M1P77-B1 | Interior part applications |
| WSB-M1P77-B2 | General exterior part applications |
| WSB-M1P77-B3 | Special exterior part applications requiring superior appearance. |
| WSB-M1P77-B4 | Special exterior part applications requiring superior appearance and improved durability. |

**CAUTION:** Based upon field survey and accelerated laboratory testing experience, plated parts with designs that are not in conformance with the Corporate Plated Part Design Restrictions Booklet (see para 5.1 of this specification) or the grille design guidelines will not be capable of consistently meeting the requirements of these specifications on a production basis without the use of extraordinary processing techniques, e.g., use of auxiliary anodes, reduction in the parts per rack ratio, etc.

### FEASIBILITY

If the requirements of this specification cannot be met due to part design restrictions, the supplier will inform the responsible product engineering office.

## 3. REQUIREMENTS

All requirements identified for each specification must be met to achieve acceptable field durability. No one requirement, exclusive of others, is capable of insuring satisfactory performance. Any deviations to the requirements of these specifications may be subject to additional performance requirements.

All part testing requirements apply to those areas of the part identified as a significant surface per para 5.2 unless otherwise specified on the engineering drawing.

| Date | Action | Revisions |
|---|---|---|
| | | |
| 2003 07 29 | Revised | Para 3.0 inserted; Para 3.9 & 4 deleted |
| 1988 04 20 | SM/ER 3841 TC | Released J. Burke, JAF, MP. NAAO. J. Lines. EAO. |


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## 3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

## 3.1 STATISTICAL PROCESS

The following characteristics shall form part of the Control Plan but shall in no way preclude the control of additional characteristics deemed significant by the supplier and/or Ford SQA.

Significant Characteristics

(See requirement values within the body of these specifications)

. Plating Thickness
. Plating Ductility
. Microporosity
. S.T.E.P. Potential
. Sulphur Content

## 3.2 APPEARANCE

All parts shall have the finish (bright, low gloss or paint overlay) specified on the engineering drawing. The plated parts shall be free from surface imperfections. Low gloss or black parts shall match the approved Styling master sample for appearance.

### 3.2.1 Buffing of Plating

Because of the potential adverse effect on corrosion resistance, buffing of final chromium plating on exterior parts is not permitted. Brushing or other approved mechanical treatment on nickel coatings are permitted provided that minimum plating thickness requirements are met after treatment.

## 3.3 PLATING ADHESION
(ASTM B 571)

Adhesion of the electroplate to the base metal and between layers of plating must conform to the requirements of the following test methods per ASTM B 571 unless otherwise indicated:

### 3.3.1 Bend Tests (Bend the part or sections of the part)

No peeling, flaking, or lift-off of the electroplate from the substrate or between layers of the electroplate is permitted following the bend tests.

### 3.3.2 Grind-Saw Test

No lifting or peeling of the electroplate from the substrate or between layers of the electroplate is permitted following the grind-saw test.

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