#### **Document ID# 502794**

# ALUMINUM WHEEL REFINISHING #53-17-03A - (May 1, 1996)

**REVISION: 04/29/96** 

THIS BULLETIN IS BEING REVISED TO DELETE THE 1990 MODEL YEAR AND ADD THE 1996 MODEL YEAR. PLEASE DISCARD CORPORATE BULLETIN NUMBER 53-17-03 (SECTION 10 - BODY).

\*

SUBJECT: INFORMATION ON ALUMINUM WHEEL REFINISHING

**MODELS: 1991-96 PASSENGER CARS AND TRUCKS** 

\*

THIS BULLETIN SUPERSEDES AND CANCELS ALL PREVIOUS SERVICE BULLETINS CONCERNING THE REFINISHING OF ALUMINUM WHEELS. THE PURPOSE OF THIS SERVICE BULLETIN IS TO ASSIST DEALERSHIPS IN REPAIRING THE DISCOLORATION OR SURFACE DEGRADATION THAT HAS OCCURRED ON STYLED ALUMINUM WHEELS.

THIS BULLETIN PROVIDES NEW PROCEDURES AND SPECIFIC MATERIALS FOR THE REFINISHING OF PAINTED ALUMINUM WHEELS OR ALUMINUM WHEELS WITH DISCOLORATION OR SURFACE DEGRADATION.

IMPORTANT: THE RE-MACHINING OF ALUMINUM WHEELS IS NOT RECOMMENDED. THE RE-CLEAR COATING OF ALUMINUM WHEELS IS NO LONGER RECOMMENDED DUE TO CONCERNS OF REPAIR DURABILITY.

THE NEW PROCEDURE REQUIRES THE WHEEL SURFACE BE PLASTIC MEDIA BLASTED TO REMOVE OLD PAINT OR CLEAR COAT. CHEMICAL STRIPPERS ARE NOT

Service Information

RECOMMENDED.

### **MATERIAL REQUIRED:**

SYSTEM 1: DUPONT PRODUCTS 3939-S CLEANING SOLVENT 615/616 ETCHING PRIMER URO 5000 PRIMER SURFACER IMRON 6000 BASECOAT 3440-S IMRON CLEAR

SYSTEM 2: PPG PRODUCTS DX533 ALUMINUM CLEANER DX503 ALUMINUM CONDITIONER DP EPOXY PRIMER DELTRON BASECOAT (DBC) CONCEPT 2001 CLEAR ACRYLIC URETHANE

SYSTEM 3: SPIES HECKER PERMAHYD SILICONE REMOVER 7090 PERMAHYD 1:1 PRIMER 4070 PERMAHYD 2:1 SURFACER 5080 PERMAHYD BASE COAT SERIES 280/285 PERMAHYD H.S. CLEARCOAT 8060

### **COLOR SELECTION**

IF THE WHEELS BEING PAINTED WERE PREVIOUSLY CLEARCOATED ALUMINUM, WE WOULD RECOMMEND USING CORSICAN SILVER WAEQ9283 FOR A FINE "ALUMINUM-LIKE" LOOK OR SPARKLE SILVER WA9967 FOR A VERY BRIGHT LOOK. AS AN OPTION TO THE CUSTOMER, YOU MAY ALSO USE BODY COLOR. FOR COLOR SELECTION AND VERIFICATION, REFER TO YOUR PAINT MANUFACTURER'S COLOR BOOK. ON WHEELS THAT WERE PREVIOUS CLEARCOATED ALUMINUM IT IS RECOMMENDED THAT ALL FOUR WHEELS BE REFINISHED TO MAINTAIN COLOR UNIFORMITY. FOR COLOR UNIFORMITY IT IS RECOMMENDED THAT ALL FOUR WHEELS, AND THEIR CENTER CAPS BE REFINISHED.

IMPORTANT: THE PRODUCTS LISTED MUST BE USED AS A SYSTEM. DO NOT MIX OTHER MANUFACTURERS' PRODUCT LINES WITH THE REQUIRED MATERIALS. PRODUCTS LISTED IN THIS BULLETIN HAVE SHOWN THE REQUIRED REPAIR DURABILITY, AND CURRENTLY ARE THE ONLY PAINT SYSTEMS THAT MEET GM SPECIFICATION 4350M-A336.

### **PROCEDURES**

- 1. REMOVE WHEELS FROM VEHICLE, TIRES MAY REMAIN MOUNTED ON WHEELS.
- 2. REMOVE BALANCE WEIGHTS AND MARK THEIR LOCATION ON TIRE.
- 3. WIPE EXCESS GREASE, ETC. FROM WHEELS WITH WAX AND GREASE REMOVER.
- 4. HAVE WHEELS PLASTIC MEDIA BLASTED TO REMOVE CLEARCOAT. FOR FURTHER

INFORMATION ON MEDIA BLASTING IN YOUR AREA, CALL US TECHNOLOGIES INC., CONTACT DAVE ROSENBURG AT 1-800-634-9185.

### **CAUTION:**

IT IS MANDATORY THAT ADEQUATE RESPIRATORY PROTECTION BE WORN. EXAMPLES OF SUCH PROTECTION ARE: AIR LINE RESPIRATORS WITH FULL HOOD OR HALF MASK. IF NOT AVAILABLE, USE A VAPOR/PARTICULATE RESPIRATOR THAT RESPIRATOR MANUFACTURER RECOMMENDS AS EFFECTIVE FOR ISOCYANIATE VAPOR AND MISTS (UNLESS LOCAL REGULATIONS PREVAIL).

- 5. PAINTING PROCESS
- A. REFER TO ATTACHMENTS 1-3 FOR EACH SYSTEM'S INDIVIDUAL FORMULA AND PROCESS.
- B. AFTER FOLLOWING THE SPECIFIC SYSTEM'S INDIVIDUAL FORMULA AND PROCESS, FOLLOW THESE STEPS:
- 6. UNMASK WHEELS.
- 7. CLEAN ALL WHEEL MOUNTING SURFACE OF ANY CORROSION, OVERSPRAY, OR DIRT.
- 8. INSTALL NEW COATED BALANCE WEIGHTS, AT MARKED LOCATIONS.
- 9. REPLACE WHEELS ON VEHICLE.
- 10. \*\*USE A TORQUE STICK ON AN IMPACT WRENCH, OR A TORQUE WRENCH TO CONSISTENTLY AND UNIFORMLY FASTEN THE WHEEL TO THE SPECIFIED TORQUE FOR THE VEHICLE. THE STAR PATTERN MUST BE FOLLOWED.\*\*

IMPORTANT: TORQUE STICKS MUST BE USED ANY TIME AN IMPACT WRENCH IS USED TO TIGHTEN WHEEL NUTS.

ATTACHMENT 1 PAINTING PROCESS SYSTEM: DUPONT PRODUCTS PAINT COLOR INFORMATION: CORSICAN SILVER WA EQ9283 DUPONT #C9143 SPARKLE SILVER WA9967; DUPONT #C9339

- 1. WIPE WHEEL WITH CLEANING SOLVENT: 3939-S, 3949-S OR3900-S.
- 2. MASK OFF TIRES.

### IMPORTANT: 3. MASK OFF ALL WHEEL MOUNTING SURFACES AND WHEEL MOUNT SURFACES.

- 4. APPLY TWO COATS OF 615/616-S ETCHING PRIMER TO WHEEL ALLOWING 10 MINUTES FLASH BETWEEN COATS. ALLOW TO DRY FOR 30 MINUTES BEFORE APPLYING PRIMER COAT.
- 5. APPLY URO 5000 PRIMER 1220/193-S + ACCELERATOR 389-S USING TWO COATS AT 65-70 PSI AT THE GUN. ALLOW 12-15 MINUTES BETWEEN COATS. FORCE BAKE 30 MINUTES AT 140 DEGREES F (60 C).
- 6. SCUFF SAND USING GREEN SCOTCH-BRITE PAD.
- 7. SOLVENT WIPE BEFORE TOP COATING.
- 8. APPLY IMRON 6000 BASE COAT TO WHEEL. 2-3 COATS TO HIDING AT 60-70 PSI ALLOWING TO FLASH BETWEEN COATS. BASE COAT NEEDS TO DRY 20-30 MINUTES BEFORE CLEARCOAT IS APPLIED.
- 9. APPLY 3440-S CLEARCOAT TO WHEEL USING TWO COATS AT 60-70 PSI. FLASH 10-15 MINUTES BETWEEN COATS. 389-S CAN BE USED IN BASECOAT AND CLEARCOAT TO GIVE FASTER SET UP TIMES.
- 10. ALLOW OVERNIGHT DRY BEFORE REASSEMBLE. CAN BE BAKED FOR 30 MINUTES AT 140 DEGREES F (60 C).

### **ATTACHMENT 2**

PAINTING PROCESS PPG SYSTEM PAINT COLOR INFORMATION: CORSICAN SILVER WAEQ9283; PPG #DBC-3531 SPARKLE SILVER WA9967; PPG #35367

- 1. WASH ENTIRE WHEEL WITH ALUMINUM CLEANER DX533, MIX 1:3 WITH WATER. ALLOW TO REACT 2-3 MINUTES AND RINSE THOROUGHLY.
- 2. WASH ENTIRE WHEEL WITH ALUMINUM CONDITIONER DX503 STRAIGHT FROM THE CONTAINER. ALLOW TO REACT 2-3 MINUTES UNTIL PALE GOLD OR TAN COLOR DEVELOPS. RINSE THOROUGHLY AND DRY.
- 3. MASK OFF TIRES.

IMPORTANT: 4. MASK OFF ALL WHEEL NUT MOUNTING SURFACES AND WHEEL

### MOUNTING SURFACES.

- 5. APPLY 1-2 COATS OF DP PRIMER AND ALLOW TO FLASH FOR 15-20 MINUTES.
- 6. APPLY 2-3 COATS OF DELTRON BASECOAT (DBC) AND ALLOW TO FLASH 20 MINUTES AFTER THE FINAL COAT.
- 7. APPLY TWO (2) WET COATS OF CONCEPT 2001 ACRYLIC URETHANE.
- 8. FLASH 20 MINUTES AND BAKE 140 DEGREES F (60 C) FOR 30 MINUTES.
- FOR MORE INFORMATION CONTACT YOUR PPG JOBBER.
- ATTACHMENT 3 PAINTING PROCESS SPIES HECKER SYSTEM PAINT COLOR INFORMATION: CORSICAN SILVER AWEQ9283; SH-72913 SPARKLE SILVER WA9967; SH-71912
- 1. CLEAN WITH PERMAHYD SILICONE REMOVER 7090.
- 2. MASK OFF TIRES.

## IMPORTANT: 3. MASK OFF ALL WHEEL NUT MOUNTING SURFACES AND WHEEL MOUNTING SURFACES.

- 4. APPLY 1-1/2 COATS OF PERMAHYD 1:1 PRIMER 4070. MIX 1:1 WITH PERMAHYD HARDENER 3070 AS PER TDS.
- 5. ALLOW TO FLASH FOR 30 MINUTES.
- 6. APPLY TWO (2) COATS OF PERMAHYD 2:1 SURFACER 5080. MIX 2:1 WITH PERMAHYD HARDENER 3071 AS PER TDS.
- 7. BAKE FOR 60 MINUTES AT 140 DEGREES F (60 C) OR ALLOW TO FLASH FOR 3 HOURS AT 68 DEGREES F (20 C).
- 8. APPLY PERMAHYD BASE COAT SERIES 280/285 AS PER TDS.
- 9. ALLOW TO FLASH 10 TO 15 MINUTES.
- 10. APPLY 1 TO 2 COATS OF PERMACRON HIGH SOLID CLEAR COAT 8060 AS PER TDS.

11. ALLOW TO FLASH 10 MINUTES. THEN BAKE AT 140 DEGREES F (60 C) FOR 40 MINUTES.

FOR MORE INFORMATION, CONTACT YOUR SPIES HECKER JOBBER.

WE BELIEVE THESE SOURCES AND THEIR PRODUCTS TO BE RELIABLE. THERE MAY BE ADDITIONAL MANUFACTURERS OF SUCH PRODUCTS. GENERAL MOTORS DOES NOT ENDORSE, INDICATE ANY PREFERENCE FOR OR ASSUME ANY RESPONSIBILITY FOR THE PRODUCTS OR EQUIPMENT FROM THESE FIRMS OR FOR ANY SUCH ITEMS WHICH MAY BE AVAILABLE FROM OTHER SOURCES.

### **WARRANTY INFORMATION:**

FOR VEHICLES REPAIRED UNDER WARRANTY, USE: LABOR OPERATION: A3331 WHEEL, ALUMINUM-REFINISH/CLEARCOAT NOTE: DOES NOT INCLUDE TIRE DISMOUNT OR BALANCE. INCLUDES TIME TO R&R WHEEL(S) FROM VEHICLE. LABOR TIME/MATERIAL ALLOWANCE: TIME MATERIAL ONE WHEEL 1.7 HRS. GB ADD: FOR EACH ADDITIONAL 1.3 HRS. GB FOR TWO TONE (EACH) 0.9 HR. GA FOR MEDIA BLAST (ONE) 0.4 HR. FOR EACH ADDITONAL 0.2 HR.

FIGURES: 0

GENERAL MOTORS BULLETINS ARE INTENDED FOR USE BY PROFESSIONAL TECHNICIANS, NOT A "DO-IT-YOURSELFER". THEY ARE WRITTEN TO INFORM THOSE TECHNICIANS OF CONDITIONS THAT MAY OCCUR ON SOME VEHICLES, OR TO PROVIDE INFORMATION THAT COULD ASSIST IN THE PROPER SERVICE OF A VEHICLE. PROPERLY TRAINED TECHNICIANS HAVE THE EQUIPMENT, TOOLS, SAFETY INSTRUCTIONS AND KNOW-HOW TO DO A JOB PROPERLY AND SAFELY. IF A CONDITION IS DESCRIBED, DO NOT ASSUME THAT THE BULLETIN APPLIES TO YOUR VEHICLE, OR THAT YOUR VEHICLE WILL HAVE THAT CONDITION. SEE A GENERAL MOTORS DEALER SERVICING YOUR BRAND OF GENERAL MOTORS VEHICLE FOR INFORMATION ON WHETHER YOUR VEHICLE MAY BENEFIT FROM THE INFORMATION.

COPYRIGHT 1996 GENERAL MOTORS CORPORATION. ALL RIGHTS RESERVED.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



© Copyright General Motors Corporation. All Rights Reserved.

**Document ID# 502794**