4. Repair Instruction for Fuel Flap

1. MOLDED PART SURFACE REPAIR

The molded resin material differs in its properties from PP (polypropylene) used as bumper surface covering material. If its surface is scratched, the affected area can be easily repaired by sanding with grit sandpaper. A dent can also be filled using a method similar to that used for steel panel repair.

2. REFINISHING

The repaired resin material surface or material requiring only surface coating can be applied with primer and top-coat after foreign matter (dirt, dust, etc.) is removed. Paint used for repairing steel plates can also be applied for refinishing resin material.

3. PROCESS STEPS

Process No.	Process name	Job contents		
1	Sanding ①	If damage penetrates molded material, water sand damaged and molded material surfaces affected using sand paper (#500 to #1000).		
2	Degreasing ① (Cleaning)	Clean off dirt, dust, oil/grease, etc., using white gasoline or alcohol.		
3	Filling	Apply filler (polyester or epoxy) evenly to dented portion (which results from sanding ① above.		
4	Sanding ②	Sand filler smooth, as required, using sand paper (#500 to #1000) and water.		
5	Degreasing ② (Cleaning)	Clean off foreign matter (dust, dirt, oil/grease, etc.) using white gasoline or alcohol.		
6	Undercoating (Primer coating)	Apply primer to the entire filler range (and sanded resin material, if necessary). ● Film thickness: Approx. 5 µm ● Spray pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm^2, 36 — 50 psi)		
7	Drying ①	Allow to dry in accordance with paint-baking requirements to be used. Ex.: Urethane-based paint ... 30 minutes at 80°C (176°F)		
8	Sanding ③	Sand filler (Primer surface) smooth using sand paper (#500 to #1000), as required.		
9	Degreasing ③ (Cleaning)	Wipe off foreign matter (dust, dirt, oil/grease, etc.) using white gasoline or alcohol.		
10	Top coating (I)	Solid color	Metallic color	Mica color
		Apply paint using spray gun. ● Film thickness: 30 — 40µ ● Spray pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm^2, 36 — 50 psi)	Apply color coat using spray gun. ● Film thickness: 20 — 30µ ● Spray pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm^2, 36 — 50 psi)	Apply color coat using spray gun. ● Film thickness: 35 — 45µ ● Spray pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm^2, 36 — 50 psi)
11	Air drying ①	Leave coated surface at room temperature [20°C (68°F)] for approx. 10 minutes until it is half-dry.		
12	Drying ②	Solid color	Metallic color	Mica color
		Dry at 80°C (176°F) for 30 minutes.	Unnecessary.	Dry at 80°C (176°F) for 30 minutes.

Process No.	Process name	Job contents		
13	Top coating (II)	Unnecessary.	Apply clear coat to color coat. ● Film thickness: 20 — 30μ ● Spray pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm^2, 36 — 50 psi)	Apply mica coat to color coat. ● Film thickness: 20 — 30μ ● Spray pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm^2, 36 — 50 psi)
14	Air drying ②	Unnecessary.	Allow to half-dry at 20°C (68°F) for approx. 20 minutes.	
15	Drying ③	Unnecessary.	Dry at 80°C (176°F) for 10 minutes.	Unnecessary.
16	Top coating (III)	Unnecessary.	Unnecessary.	Apply clear coat to mica coat. ● Film thickness: 20 — 30μ ● Spray pressure: 245 — 343 kPa (2.5 — 3.5 kg/cm^2, 36 — 50 psi)
17	Air drying ③	Unnecessary.		Allow to half-dry at 20°C (68°F) for 10 minutes.
18	Drying ④	Unnecessary.	Unnecessary.	Allow to dry at 80°C (176°F) for 30 minutes.
19	Final inspection	Check the condition of refinished areas.		

NOTE:
Processes Nos. 1 through 4 refer to work required when damage penetrates the resin material.