NATEF Task List - Collision Repair & Refinish
Painting and Refinishing

Name:_____
Date:_____

For every task in *Painting and Refinishing* , the following safety requirements must be strictly enforced: Comply with personal and environmental safety practices associated with clothing and the use of gloves; respiratory protection; eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals/materials in accordance with local, state, and federal safety and environmental regulations.

IV. PAINTING AND REFINISHING		**Week**											
	A. Safety Precautions	1	2	3	4	5	6	7	8	9	10	11	12
HP-I	1. Identify and take necessary precautions with hazardous operations and materials according to federal, state, and local regulations.												
HP-I	2. Identify safety and personal health hazards according to OSHA guidelines and the “Right to Know Law”.												
HP-I	3. Inspect spray environment and equipment to ensure compliance with federal, state and local regulations, and for safety and cleanliness hazards.												
HP-I	4. Select and use a NIOSH approved air purifying respirator. Inspect condition and ensure fit and operation. Perform proper maintenance in accordance with OSHA Regulation 1910.134 and applicable state and local regulation.												
HP-I	5. Select and use a NIOSH approved supplied air (Fresh Air Make-up) respirator system. Perform proper maintenance in accordance with OSHA Regulation 1910.134 and applicable state and local regulation												
HP-I	6. Select and use the proper personal safety equipment for surface preparation, spray gun and related equipment operation, paint mixing, matching and application, paint defects, and detailing (gloves, suits, hoods, eye and ear protection, etc.).												

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IV. PAINTING AND REFINISHING B. Surface Preparation		Week											
		1	2	3	4	5	6	7	8	9	10	11	12
HP-I	1. Inspect, remove, store, and replace exterior trim and components necessary for proper surface preparation.												
HP-I	2. Soap and water wash entire vehicle; use appropriate cleaner to remove contaminants.												
HP-G	3. Inspect and identify type of finish, surface condition, and film thickness; develop and document a plan for refinishing using a total product system.												
HP-I	4. Strip paint to bare substrate (paint removal).												
HP-I	5. Dry or wet sand areas to be refinished.												
HP-I	6. Featheredge areas to be refinished.												
HP-I	7. Apply suitable metal treatment or primer in accordance with total product systems.												
HP-I	8. Mask and protect other areas that will not be refinished.												
HP-I	9. Mix primer, primer-surfacer or primer-sealer.												
HP-G	10. Identify a complimentary color or shade of undercoat to improve coverage.												
HP-I	11. Apply primer onto surface of repaired area.												

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IV. PAINTING AND REFINISHING B. Surface Preparation		Week											
		1	2	3	4	5	6	7	8	9	10	11	12
HP-I	12. Apply two-component finishing filler to minor surface imperfections.												
HP-I	13. Block sand area to which primer-surfacer has been applied.												
HP-I	14. Dry sand area to which finishing filler has been applied.												
HP-I	15. Remove dust from area to be refinished, including cracks or moldings of adjacent areas.												
HP-I	16. Clean area to be refinished using a final cleaning solution.												
HP-I	17. Remove, with a tack rag, any dust or lint particles from the area to be refinished.												
HP-I	18. Apply suitable sealer to the area being refinished.												
HP-I	19. Scuff sand to remove nibs or imperfections from a sealer.												
HP-G	20. Apply stone chip resistant coating.												
HP-G	21. Restore caulking and seam sealers to repaired areas.												
HP-I	22. Prepare adjacent panels for blending.												
HP-I	23. Identify the types of rigid, semi-rigid or flexible plastic parts to be refinished; determine the materials needed, preparation, and refinishing procedures.												

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IV. PAINTING AND REFINISHING B. Surface Preparation (continued)		Week											
		1	2	3	4	5	6	7	8	9	10	11	12
HP-I	24. Identify metal parts to be refinished; determine the materials needed, preparation, and refinishing procedures.												

IV. PAINTING AND REFINISHING C. Spray Gun and Related Equipment Operation		Week											
		1	2	3	4	5	6	7	8	9	10	11	12
HP-I	1. Inspect, clean, and determine condition of spray guns and related equipment (air hoses, regulators, air lines, air source, and spray environment).												
HP-I	2. Select spray gun setup (fluid needle, nozzle, and cap) for product being applied.												
HP-I	3. Test and adjust spray gun using fluid, air and pattern control valves.												
HP-G	4. Demonstrate an understanding of the operation of pressure spray equipment.												

IV. PAINTING AND REFINISHING D. Paint Mixing, Matching, and Applying		Week											
		1	2	3	4	5	6	7	8	9	10	11	12
HP-I	1. Identify color code by manufacturer's vehicle information label.												
HP-I	2. Shake, stir, reduce, catalyze/activate, and strain refinish materials.												

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IV. PAINTING AND REFINISHING D. Paint Mixing, Matching, and Applying (continued)		Week											
		1	2	3	4	5	6	7	8	9	10	11	12
HP-I	3. Apply finish using appropriate spray techniques (gun arc, angle, distance, travel speed, and spray pattern overlap) for the finish being applied.												
HP-I	4. Apply selected product on test or let-down panel; check for color match.												
HP-G	5. Apply single stage topcoat.												
HP-I	6. Apply basecoat/clearcoat for panel blending and panel refinishing.												
HP-G	7. Apply basecoat/clearcoat for overall refinishing.												
HP-I	8. Remove nibs or imperfections from basecoat.												
HP-G	9. Refinish rigid or semi-rigid plastic parts.												
HP-I	10. Refinish flexible plastic parts.												
HP-G	11. Apply multi-stage coats for panel blending and overall refinishing.												
HP-I	12. Identify and mix paint using a formula.												
HP-G	13. Identify poor hiding colors; determine necessary action.												
HP-I	14. Tint color using formula to achieve a blendable match.												

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IV. PAINTING AND REFINISHING D. Paint Mixing, Matching, and Applying (continued)		Week											
		1	2	3	4	5	6	7	8	9	10	11	12
HP-I	15. Identify alternative color formula to achieve a blendable match.												
HP-G	16. Identify the materials equipment, and preparation differences between solvent and waterborne technologies.												

IV. PAINTING AND REFINISHING E. Paint Defects - Causes and Cures		Week											
		1	2	3	4	5	6	7	8	9	10	11	12
HP-G	1. Identify blistering (raising of the paint surface, air entrapment); determine the cause(s) and correct the condition.												
HP-I	2. Identify a dry spray appearance in the paint surface; determine the cause(s) and correct the condition.												
HP-I	3. Identify the presence of fish-eyes (crater-like openings) in the finish; determine the cause(s) and correct the condition.												
HP-G	4. Identify lifting; determine the cause(s) and correct the condition.												
HP-I	5. Identify clouding (mottling and streaking in metallic finishes); determine the cause(s) and correct the condition.												
HP-I	6. Identify orange peel; determine the cause(s) and correct the condition.												

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IV. PAINTING AND REFINISHING E. Paint Defects - Causes and Cures (continued)		Week											
		1	2	3	4	5	6	7	8	9	10	11	12
HP-I	7. Identify overspray; determine the cause(s) and correct the condition.												
HP-G	8. Identify solvent popping in freshly painted surface; determine the cause(s) and correct the condition.												
HP-I	9. Identify sags and runs in paint surface; determine the cause(s) and correct the condition.												
HP-I	10. Identify sanding marks or sandscratch swelling; determine the cause(s) and correct the condition.												
HP-G	11. Identify contour mapping/edge mapping while finish is drying; determine the cause(s) and correct the condition.												
HP-G	12. Identify color difference (off-shade); determine the cause(s) and correct the condition.												
HP-G	13. Identify tape tracking; determine the cause(s) and correct the condition.												
HP-G	14. Identify low gloss condition; determine the cause(s) and correct the condition.												
HP-G	15. Identify poor adhesion; determine the cause(s) and correct the condition.												

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IV. PAINTING AND REFINISHING E. Paint Defects - Causes and Cures (continued)		Week											
		1	2	3	4	5	6	7	8	9	10	11	12
HP-G	16. Identify paint cracking (shrinking, splitting, crowsfeet or line-checking, micro-checking, etc.); determine the cause(s) and correct the condition.												
HP-G	17. Identify corrosion; determine the cause(s) and correct the condition.												
HP-I	18. Identify dirt or dust in the paint surface; determine the cause(s) and correct the condition.												
HP-G	19. Identify water spotting; determine the cause(s) and correct the condition.												
HP-G	20. Identify finish damage caused by bird droppings, tree sap, and other natural causes; correct the condition.												
HP-G	21. Identify finish damage caused by airborne contaminants (acids, soot, rail dust, and other industrial-related causes); correct the condition.												
HP-G	22. Identify die-back conditions (dulling of the paint film showing haziness); determine the cause(s) and correct the condition.												
HP-G	23. Identify chalking (oxidation); determine the cause(s) and correct the condition.												
HP-G	24. Identify bleed-through (staining); determine the cause(s) and correct the condition.												

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IV. PAINTING AND REFINISHING E. Paint Defects - Causes and Cures (continued)		Week											
		1	2	3	4	5	6	7	8	9	10	11	12
HP-G	25. Identify pin-holing; determine the cause(s) and correct the condition.												
HP-I	26. Identify buffing-related imperfections (swirl marks, wheel burns); correct the condition.												
HP-G	27. Identify pigment flotation (color change through film build); determine the cause(s) and correct the condition.												

IV. PAINTING AND REFINISHING F. Final Detail		Week											
		1	2	3	4	5	6	7	8	9	10	11	12
HP-G	1. Apply decals, transfers, tapes, woodgrains, pinstripes (painted and taped), etc.												
HP-I	2. Sand, buff and polish fresh or existing finish to remove defects as required.												
HP-I	3. Clean interior, exterior, and glass.												
HP-I	4. Clean body openings (door jambs and edges, etc.).												
HP-I	5. Remove overspray.												
HP-I	6. Perform vehicle clean-up; complete quality control using a checklist.												