

Task	Hazards	Consequences	Causal Factors	Control Measures	Residual Risk Level
1. Engine Inspection	Hot surfaces, moving parts	Burns, lacerations, injury	Lack of awareness, engine on, improper PPE	- Engine off and cool - Lockout/tagout - Use gloves, protective sleeves	Low
2. Landing Gear Replacement	Heavy lifting, unstable parts	Musculoskeletal, crush injuries	Poor lifting, inadequate equipment	- Use lifting tools - Team briefings - Lifting technique training	Medium
3. Hydraulic System Maintenance	High-pressure fluids, leaks	Eye injuries, skin burns, slips	Insufficient pressure release, damaged hoses	- Depressurize system - Inspect hoses - Use safety goggles, gloves	Low
4. Electrical Troubleshooting	Electrical shock, arcing	Burns, electrocution	Lack of de-energizing, inadequate grounding	- De-energize system - Use insulated tools, gloves - Test voltage	Medium
5. Fuel Tank Inspection	Toxic fumes, confined space	Respiratory issues, asphyxiation	Poor ventilation, lack of PPE	- Forced-air ventilation - Respirators - Confined space protocols	High
6. Wing Surface Repairs	Falls, unstable surfaces	Fractures, concussions	Lack of fall protection, improper positioning	- Use fall protection equipment - Train in ladder safety	Medium
7. Tire Pressure Check	Over-pressurization, blowout	Eye injuries, hand injuries	Faulty gauge, rapid inflation	- Use calibrated gauge - Inflate slowly, shield hands	Low
8. Avionics Testing	Electrical shock, equipment malfunction	Burns, data loss	Insufficient insulation, software issues	- Use insulated tools - Grounding procedures - Backup systems	Medium
9. Cabin Lighting Replacement	Fragile glass, sharp edges	Cuts, eye injury	Improper handling, broken glass	- Use gloves, safety glasses - Handle bulbs with care	Low
10. Propeller Blade Inspection	Sharp edges, pinch points	Lacerations, crush injuries	Inadequate guarding, moving parts	- Wear cut-resistant gloves - Disable power to the area	Medium
11. Oxygen System Servicing	High-pressure gas, leaks	Eye/skin injuries, suffocation	Damaged lines, improper equipment	- Check for leaks before servicing - Use oxygen-safe materials	Medium
12. Battery Replacement	Chemical exposure, electrical shock	Burns, eye injuries	Improper disposal, lack of PPE	- Wear gloves, goggles - Follow disposal protocols	Low
13. Brake System Testing	Pressurized lines, hydraulic fluid	Eye injuries, slips	Loose connections, damaged hoses	- Check lines, connections - Use gloves, face shield	Low
14. Flight Deck Cleaning	Chemical fumes, sharp objects	Respiratory issues, cuts	Inadequate ventilation, lack of PPE	- Use appropriate cleaning solutions - Ventilate area	Low
15. De-Icing Operations	Chemical exposure, slippery surfaces	Skin irritation, falls	Poor weather, lack of PPE	- Wear chemical-resistant gloves, boots - Place anti-slip mats	Medium
16. Oil Filter Replacement	Hot surfaces, oil spills	Burns, slips	Inadequate cooling, spillage	- Allow engine to cool - Use absorbent mats	Low
17. Window Seal Replacement	Chemical fumes, confined space	Respiratory issues, skin irritation	Poor ventilation, improper PPE	- Wear respirators - Ventilate with fans	Medium
18. Aircraft Jacking	Unstable jacks, uneven surfaces	Tip-over, crush injuries	Incorrect jack positioning, poor ground	- Ensure level surface - Double-check jack placement	High
19. APU (Auxiliary Power Unit) Maintenance	Hot surfaces, toxic fumes	Burns, respiratory issues	Inadequate cool-down, poor ventilation	- Allow cool-down time - Wear respirators	Medium
20. Nose Gear Steering System Check	Moving parts, hydraulic leaks	Crush injuries, slips	Lack of isolation, improper PPE	- Disable power - Use gloves, face protection	Medium