**INSTALLATION INSPECTION CHECKLIST**

Date\_\_\_\_\_\_\_\_\_\_\_\_ WO #\_\_\_\_\_\_\_\_\_\_\_\_ N #\_\_\_\_\_\_\_\_\_\_\_\_ Lead Technician\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Lead Installation Technician and Installation Dept. Supervisor will be present for installation steps planning. The Lead Installation Technician is responsible for reviewing every detail of this document, & reporting any problems to the Installation Dept. Supervisor.**

**Initial block for each item when completed.**

**Pre-Aircraft Arrival:**

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| 1. |  | Obtain copies of Work Order & Installation Proposal with explicit details of installation. |
| 2. |  | Inventory all parts & equipment required for the installation (if possible). Group them in your area. Verify equipment installation kits are complete. Notify Installation Dept. Supervisor of any shortages. |
| 3. |  | Verify proper Airworthiness Documentation exists for all equipment. |
| 4. |  | Gather appropriate installation data: Manufacturers installation instructions, aircraft wiring diagrams, DER engineering prints, etc. |
| 5. |  | Verify currency and latest revision of all manuals used for the installation. |
| 6. |  | Verify proper tooling & materials for the installation is readily available. |
| 7. |  | Gather preliminary data for FAA Form 337 (if required) & forward to FAA Coord. |

**Preliminary Inspection:** (Mark N/A in block if item is not applicable)

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| 1. |  | Obtain copies of current W&B, Equipment List, & Aircraft Registration. Record Aircraft Flight Manual Part No., Revision No., & Date (if required). |
| 2. |  | Check logbook entries for FAR 91.411 & 91.413 (if possible). Note dates nearing expiration or past due. |
| 3. |  | Note aircraft voltage: \_\_\_\_\_\_\_\_\_\_\_\_. |
| 4. |  | Aircraft walk-around. Look for loose or missing fasteners. Inspect exterior windows & paint for scratches & defects. Inspect static wicks, pitot mast, static ports, & antennas for airworthiness. |
| 5. |  | Aircraft interior inspection. Inspect cabin doorway, upholstery, seats, carpet, trim, & headliner for condition. |
| 6. |  | Instrument panel inspection. Inspect panels for security of mounting, scratches & defects, loose switches & instruments. Check glare shield for security & condition. |
| 7. |  | Flight Controls inspection. Pull controls through full range of travel, note any interference, binding, & noises. |
| 8. |  | Avionics stack inspection. Inspect existing equipment for security of mounting & appearance. Inspect rack mountings for back-support structure. |
| 9. |  | Lighting inspection. Inspect all panel, instrument, flood, and radio lighting. Inspect all cabin lighting (reading, map, courtesy, passenger, etc.). Inspect all external lighting (beacons, strobes, taxi/landing, navigation, ice, etc.). |
| 10. |  | Check Pitot & Static heat for operation. |
| 11. |  | Check all avionics displays for operation & readability. Check photocells. |
| 12. |  | Annunciators' inspection. Push to test (if possible) all annunciators, including Marker lights. Check day/night switches where applicable. |
| 13. |  | Audio inspection. Check all audio selections at audio panel (speakers & phones). Check intercom system at each headset location. Check ANR system operation. Check headset jacks for airworthiness. Check avionics annunciation tones, alerts & warning audio where applicable. |
| 14. |  | Communications inspection. At each Com, check squelch action, call shop for radio check, or check using local frequencies. Check remote switches. |
| 15. |  | VHF Nav inspection. At each Nav, ground test using local frequencies, or ramp tester as applicable. Check operation of corresponding indicators. |
| 16. |  | DME inspection. At each DME, check using local frequencies, or ramp tester as applicable. Check operation of remote switches & indicators. Check remote Nav tuning where applicable. |
| 17. |  | RNAV inspection. Check using appropriate frequencies. |
| 18. |  | ADF inspection. At each ADF, check using appropriate frequencies. Check operation of corresponding indicators. |
| 19. |  | Transponder inspection. At each transponder, check test & reply lights. Ground test using ramp tester (when practical). Check encoding (when practical). Check operation of remote ident, transponder/encoder 1-2 switch, & standby switches where applicable. |
| 20. |  | RMI inspection. At each RMI, check operation of needles and heading card. |
| 21. |  | H.S.I. Inspection. At each H.S.I., check slaving & Nav function. Check operation of Nav switching system where applicable. |
| 22. |  | Glideslope inspection. At each Glideslope, ground test using local frequencies, or ramp tester as applicable. Check operation of corresponding indicators. |
| 23. |  | GPS inspection. At each GPS, check for correct position data (when practical). Check Moving Map, display, & Annunciators functions where applicable. Check database revision & currency. |
| 24. |  | Gyro inspection. Check for proper operation & system suction (when practical). |
| 25. |  | Autopilot/Flight Director inspection. Engage, check left/right, up/down, manual, heading, course 1 & 2, back course 1 & 2, needle 1 & 2, altitude hold, & yaw damper as applicable. Check operation of remote switches, annunciators, & tones. |
| 26. |  | Altimeter inspection. At each altimeter, check reading against field elevation. Check encoding (when practical). |
| 27. |  | Rad-Alt inspection. Check test and DH. Check operation of remote switches & annunciators as applicable. |
| 28. |  | Radar inspection. Check test. Check returns if aircraft is outside & clear of obstructions. |
| 29. |  | Weather Detection System inspection. Check self test functions. Check system for RF interference (if required). |
| 30. |  | EFIS/MFD inspection. At each unit, check self-test functions. Check display & annunciator functions where applicable. |
| 31. |  | TCAS inspection. Check self test functions. Verify proper display at MFD, or other. |
| 32. |  | TAWS inspection. Check self test functions. Verify proper display at MFD, or other. |
| 33. |  | Trim inspection. Check operation of electric & manual trim systems. |
| 34. |  | Static system inspection. At each Pitot/Static system, check system for leaks, security, and operation (when practical). |
| 35. |  | Circuit breakers inspection. Check breakers for security of mounting, placards, & condition of panel. |
| 36. |  | Inspect forward & aft avionics bays for available mounting space & accessibility of wiring harnesses as applicable. |
| 37. |  | Note physical layout of existing avionics, familiarize yourself with how the systems are interconnected. Make sketch or take digital photos (if required). |
| 38. |  | Inspect aircraft for available antenna mounting space. Perform Skin-Mapping procedure (if required). |
| 39. |  | List (in detail) all discrepancies noted up to this point. |
| 40. |  | Enter initials in Preliminary Inspection block, on Work Traveler (k-03.2). |

**Installation / In-progress Inspection:** (Mark N/A in block if item is not applicable)

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| 1. |  | Install protective covers on seats, floors, & carpet. Install plastic, protective film around all exterior-working areas that may be subject to damage. Clear aircraft of clutter, trash, etc. Gather owner/operators personal belongings and secure them, in an orderly fashion, in an appropriate holding area. |
| 2. |  | Open up working areas in aircraft (panels, floor boards, etc.), & check for conflicts in mounting parts/equipment. Check harness routes. Make notes. |
| 3. |  | Review labor figures on Installation Proposal, decide if more labor needs to be approved at this point. Make notes. |
| 4. |  | Review all notes & Pre-Installation Inspection discrepancies with Installation Dept. Supervisor. Assist with generating Change Orders, additional Work Order tasks, etc. |
| 5. |  | Gather necessary data & initiate FAA Form 337 paperwork (if required). |
| 6. |  | Tag any removed equipment using form KA-17 (Removed As Serviceable), and secure in equipment holding cabinet. |
| 7. |  | Pre-fabricate, mark, and test wiring harnesses on bench as much as possible for new equipment. Use a Parts Charge Out sheet & begin listing all misc. parts, wire, & supplies used during the installation. |
| 8. |  | Install & interface new equipment wiring harnesses, cables, terminals & connectors in aircraft. |
| 9. |  | Install proper circuit protection for new equipment and placard appropriately. |
| 10. |  | Contact Installation Dept. Supervisor for an In-Progress Inspection, at this point before proceeding. Verify that the inspecting Technicians initials are entered in the In-Progress Inspection block on Work Traveler (K-03.2). |
| 11. |  | Perform continuity checks of all new wiring/interfacing before applying power to aircraft. |
| 12. |  | Plug on equipment & perform power-on & functional checks of all systems (as practical) prior to harness tie-up and rack mounting. |
| 13. |  | Install new equipment racks, mounting trays, brackets, etc. using new aircraft hardware. |
| 14. |  | Tie-up all harnesses. Install any anchors, tywrap mounts, etc. if needed. Make sure to use grommets, or anti-chaff materials where airframe to harness contact may be suspected. Check flight controls for full-unobstructed travel. |
| 15. |  | Install new equipment in aircraft. Thoroughly clean all aircraft working areas of debris, sheet metal shavings, trash, etc.. |
| 16. |  | Contact Installation Dept. Supervisor for another In-Progress Inspection, at this point before proceeding. Verify that the inspecting Technicians initials are entered in the second In-Progress Inspection block on Work Traveler (K-03.2). |
| 17. |  | Correct any discrepancies found during In-Progress Inspection. Note changes that may effect Form 337. |
| 18. |  | Ensure that all affected systems have been successfully configured, tested & are working properly. |
| 19. |  | Reassemble working areas, close access panels only after inspector’s examination. Check seat rails and locks for security (whether you removed them or not). |
| 20. |  | Verify that all work has been completed per FAA Form 337, &/or STC, & that any necessary placards have been properly installed. |
| 21. |  | Take a moment to account for all tools & supplies. |
| 22. |  | Verify that all misc. parts, supplies, wire, etc, are listed on the Parts Charge Out sheet. |
| 23. |  | Vacuum carpets, arrange seats & seatbelts in a presentable fashion. Return owner/operators belongings to aircraft. |
| 24. |  | Review all Work Order tasks & Change Orders. Verify that aircraft is ready for final inspection. |
| 25. |  | Clean shop and bench areas in accordance with good housekeeping practices. |

**Final Inspection / Sign-off:** (Mark N/A in block if item is not applicable)

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| 1. |  | Update W&B & Equipment List. Install new revision into POH (if possible). |
| 2. |  | FAA Form 337 completed and mailed to SLC FSDO. |
| 3. |  | Airframe Logbook entries completed. |
| 4. |  | All airworthiness documentation, Pilot Guides, Warranty data, placed inside aircraft. |
| 5. |  | Aircraft approved for return to service by authorized personnel. |

**Technician Initials\_\_\_\_\_\_\_\_\_\_ Supervisor Initials\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_**