

Cape Cod Community College AMTS
Practical Project Guide for AMT 261 Powerplant Curriculum, Subject Items 12 & 13 Part
147, Appendix D, Part 2 - Subject C - Engine Electrical Systems

Item 12. Repair engine electrical system components. (Level 2)

Item 13. Install, check, and service engine electrical wiring, controls, switches, indicators, and protective devices. (Level 3)

Project 1A &1B & 1C

Purpose: To acquaint the student with the proper procedures for installing, checking, servicing, and repairing engine electrical wiring, controls, switches, indicators, protective devices, and components.

References:

- (1) 14 CFR, Federal Aviation Regulations for Aviation Maintenance Technicians (Current Edition), Aviation Maintenance Technician Handbook – Powerplant, Volume 1 (FAA-H-8083-32) Chapter 4
- (2) Piper Comanche 250 (PA-24) Service Manual and Parts Catalog
- (3) Cessna 402C Service Manual and Parts Manuals
- (4) Piper Colt PA 22-108 Flight Manual and Parts Catalog

Equipment and Tools Needed:

- (1) Snap-On Toolbox
- (2) Piper Comanche 250 (PA 24)
- (3) Cessna 402C
- (4) Piper Colt (PA 22-108)
- (5) Wire stripping and crimping tools

Supplies and Materials Needed:

- (1) Multimeter
- (2) Wire and wire terminals and splices

Procedure:

Complete following procedure on the assigned project 1A or 1B or 1C

- (1) Inspect the assigned aircraft's electrical system from the firewall forward to the propeller and all associated wiring, controls, switches, indicators, and protective devices installed elsewhere.
- (2) List all discrepancies found and show them to the Instructor.
- (3) Repair the Instructor-assigned discrepancies and replace the Instructor-assigned component.
- (4) Complete the appropriate maintenance record entry.

Project 1A Item 12. Repair engine electrical system components. and Item 13. Install, check, and service engine electrical wiring, controls, switches, indicators, and protective devices.

- (1) 14 CFR, Federal Aviation Regulations for Aviation Maintenance Technicians (Current Edition), Aviation Maintenance Technician Handbook – Powerplant, Volume 1 (FAA-H-8083-32) Chapter 4
- (2) Piper Comanche 250 (PA-24)
- (3) Piper Comanche 250 (PA-24) Service Manual and Parts Catalog

Project 1B Item 12. Repair engine electrical system components. and Item 13. Install, check, and service engine electrical wiring, controls, switches, indicators, and protective devices.

- (1) 14 CFR, Federal Aviation Regulations for Aviation Maintenance Technicians (Current Edition), Aviation Maintenance Technician Handbook – Powerplant, Volume 1 (FAA-H-8083-32) Chapter 4
- (2) Cessna 402C
- (3) Cessna 402C Service Manual and Parts Manuals

Project 1C Item 12. Repair engine electrical system components. and Item 13. Install, check, and service engine electrical wiring, controls, switches, indicators, and protective devices.

- (1) 14 CFR, Federal Aviation Regulations for Aviation Maintenance Technicians (Current Edition), Aviation Maintenance Technician Handbook – Powerplant, Volume 1 (FAA-H-8083-32) Chapter 4
- (2) Piper Colt (PA 22-108)
- (3) Piper Colt PA 22-108 Flight Manual and Parts Catalog

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