

Installation Tools and Parts for a Professional Installation by an A&P or Builder/Owner Doing a Field Installation of an Airmaster Propeller

Electrical Parts:

- 5 Amp Circuit Breaker if none available
- 10 feet of 20 gauge Mil Spec. wire in case a complete circuit must be added
- 4-6ea #18 crimp butt splices
- 2 ea #18-22 gauge #6 ring terminals for the circuit breaker
- 10ea 4" wire ties
- 10ea 6-8" wire ties
- Heat shrink ¼ inch and 3/8 inch (needed for mini slip ring sometimes)
- 3 Male/3 Female spade connectors (just in case you destroy a mini slip ring spade)

Expendables:

- Mobile 28 aviation grease or similar
- Loctite 243
- Paper Towels
- Anti-Seize
- Safety wire (.020 or .025 and .032)
- Torque seal paint

Nice to have:

- Spare Nordlocks (8mm / 5/16" in case you drop and loose one)
- Spare Electrical Brushes if you drop the brush block and break one.
- Spare #10 (AN501-A10-16) drilled head cap screws (if you drop one down the drain)
- 4ea Spare 1 " #6 instrument screw with nuts
- 4ea #6 lock nuts for firewall penetration
- 2ea #6 T-nuts

Electrical tools:

- Volt Ohm Meter just for troubleshooting.
- Wire stripper
- Wire terminal crimper
- Side cutter
- Heat gun
- Extension cord as long as is needed for a heat gun or light.
- Flashlight(s)

Installation Tools normally needed for panel work:

- Drill bits 1/8", ¼", Step drill bit ½ and ¾
- ¾ inch and 7/8 inch hole saw if a firewall hole needs to be put in.
- Dremel Tool with wrench
- Dremel disc cutter (diamond preferred)
- Spiral tungsten cutter

Hand tools:**Files:**

- ½ inch fine bastard file
- ¼ inch square and round Permagrit hand file
- 1/8 inch needle files round, flat and triangle.

Screw Drivers:

- Phillips #1 and #2, Flat head cabinet tip, long (8" and stubby)
- Jeweler flat and Phillips.

Wrenches:

- ½ inch open end (bring a US and Metric set)
- Assure 11/32 and 5/16 are included as well as ½ inch.
- Set of US ignition wrenches are helpful.
- Adjustable wrench (Crescent)
- Allen Wrenches metric and US (3/32 and 8 mm especially)
- Socket Set US and Metric
- Torque Wrench 8 to 20 ft. lbs. is necessary
- Crows foot (1/2 inch only for easy torque of the 5/16 inch hub bolts)
- Pliers (safety wire, needle nose and plain)

Measuring and Testing Equipment:

- Dynamic Propeller Balancer
- Propeller Protractor (makes blade setting for fine and course stops convenient)
- Digital Level (Use rather than propeller protractor.)
- Label Maker (for circuit breaker labelling)
- Micrometer and 6 inch rule.

Cosmetic Items for Touchup:

- Flat Black Instrument Paint
- Paint to match panel color.
- Black magic marker pen.