



**P176 Dimmer Power Supply
Installation Instructions**

**GA107-12
Rev B 12/5/14**



GENERAL INFORMATION

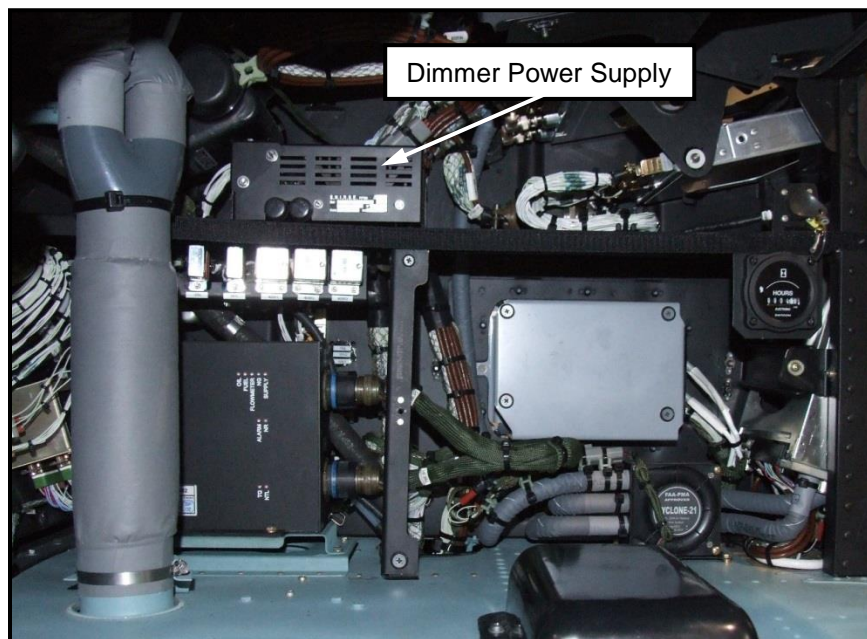
These installation instructions are for the optional P176 (G13075) Dimmer Power Supply installation kit. This installation is optional and is at the installer's discretion and is an independent installation under the Geneva Electrical System Upgrade STC SH4747NM. Be sure to read through all of the instructions before proceeding with this installation.

The Geneva Aviation P176 Dimmer Power Supply is designed as a direct plug-in replacement for Eurocopter Dimmer 31L P/N 55670 (ref 704A46814049) used in all AS350 models manufactured Post-MOD 350A07-1182. Note: this does not replace the 217L Lighting Power Unit on aircraft Post-MOD 350A07-3368. The Geneva Dimmer provides the following added features over the factory unit to improve reliability and safety:

- Improved circuitry with short circuit protection. A short in the post lights or console lights will not damage the unit.
- Thermally protected.
- Glass fuses have been replaced with automatic resetting fuses.
- Lighter weight.
- Improved mounting design for easier installation.

1. Installation

- 1.1. Follow all safety precautions and procedures as called out in the Eurocopter Maintenance Manuals before servicing the Power Supply. Be sure to disconnect the battery power before disconnecting the Dimmer Power Supply. Remove the LH side panel from the instrument panel pedestal to gain access to the Power Supply.



Factory Dimmer Installation

- 1.2. Disconnect the cable harness from the Dimmer Power Supply.
- 1.3. Remove the (4ea) 4mm screws holding the Dimmer Power Supply onto the avionics shelf and remove Power Supply. Discard the mounting hardware, or keep it with the old Dimmer Power Supply.
- 1.4. If the aircraft uses the Vertical Header connectors of the Power Supply, remove the existing large white plastic card edge connector from the side of the Power Supply that was removed, and install onto the Geneva Power Supply before installing it on the airframe. The contacts at the card edge are live during operation so this step is very important. If the aircraft uses the Card Edge connector, removed the Vertical Header protective plugs (if installed), and install them onto the new Power Supply.
- 1.5. Install the Geneva Dimmer Power Supply to the same location using the (4ea) 4mm x 8mm screws (22208BC040008L) and washers (23111AG040LE) provided with the Power Supply. Note: The Geneva Dimmer Power Supply has been designed so that the 4 factory installed spacers between the shelf and Power Supply are not required like the factory unit.
- 1.6. Inspect the cable harness for loose contacts, cuts or frays, and repair as required.
- 1.7. Connect the cable harness to Geneva Dimmer Power Supply.
- 1.8. Reconnect the Battery
- 1.9. Proceed with testing the Instrument Lighting circuit. Note: If a short circuit in the system existed prior to changing the dimmer power supply, it may have caused the damage to the factory dimmer resulting in the failure. The Geneva Dimmer Power Supply has short circuit protection built into the unit, and will not allow short circuits in the lighting system to damage the unit. If the lights will not come on, it is potentially due to the Geneva Dimmer Power Supply shutting itself down. It will resume normal operation once all shorts have been eliminated in the system.

WEIGHT AND BALANCE

The weight and balance change of this modification is negligible.

Weight of P176 dimmer added = 1.5 Lbs. Located at STA 20.92.

Weight of Eurocopter Factory #704A46814049 dimmer removed = 1.7 lbs located at STA 20.92.

LOG OF REVISIONS

REVISION LEVEL	DATE OF REVISION	PAGE or SECTION	DESCRIPTION OF CHANGE	APPROVAL
--	5/25/10	ALL	Initial Release	CLB
A	7/28/11	1	Revised effectivity to pre-Mod 3368	CLB
B	12/5/14	ALL	Updated format and company name to Eagle Copters	