

**FRESH AERO FlightLights
LED Map Light For Grumman
AA-5A & B Series Aircraft**



User Manual



Where Imagination Meets Innovation

Fresh Aero FlightLights LED Map Light for Grumman AA5 Series Aircraft

Thank you for purchasing the Fresh Aero FlightLights 4 LED Map Light for Grumman late model AA-5 series aircraft. We're confident you will be pleased with this innovative LED screw-in replacement for the existing Grumman map light bulb and housing.

This unit replaces the existing gooseneck map light incandescent bulb & housing on late AA-5 Series Grumman Aircraft with a 4 LED head and barrel assembly similar to our overhead Easy Light LED heads. Installation is very simple -- just unscrew the existing map light housing & incandescent bulb and screw the adaptor into the existing bulb socket. That's it!

Innovative features include:

- State of the art high intensity LED solid-state lighting in red or green, blue or white

The white LED Map Light is available in a polished black or aluminum finish. The blue, red and green LED heads are available in a polished black finish

- Provides illumination to the instrument panel, charts or anywhere you need illumination with a bright, clean, even light. No halos, gaps or weak spots. Makes reading instruments, maps and other printed material a joy!
- Very long life cycle. LEDs, when used correctly, have an approximate life span of 50,000 hours - over 5 years of "continuous on" use.
- Considerably brighter than the original Grumman map light with significantly less power consumption
- The Map Light is 2 3/8 inches (60 mm) long. About 2/3 of that length protrudes from the end of the goose neck. Width of the head is 15/16 inch (23 mm) flat to flat. The total weight is only 1.3 ounces.
- Vibration proof design. Aircraft vibration will not be a factor.

The FlightLights LED Map Light offers high brightness panel and map lighting at a down to earth price. With proper use, this light will provide many years of reliable, economical and safe service.

Fresh Aero FlightLights LED Map Light for Grumman AA5 Series Aircraft

Study and save this manual



WARNING

Read this entire manual before using the Fresh Aero FlightLights LED Map Light Unit. Make sure you understand the instructions and safety precautions in this manual. Keep this manual and your invoice in a safe place for future reference.

FlightLights Map Light General Safety Warnings and Precautions

Warning: Always adhere to the following safety precautions when using this product.

- Do not alter or modify the Map Light unit in any way
- Do not tamper with internal components. There are no user replacement parts.
- Handle unit carefully. Do not drop.
- Dissipate static electricity before installing Map Light
- Make sure internal “O” ring is compressed against end of gooseneck for friction lock
- Never use the FlightLights LED Map Light unit or any other single cockpit/cabin light as the only lighting source when flying at night. As with other aircraft systems, always have redundant lighting available for safe night operations.

Warning: The warnings, precautions and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the user that common sense and caution are factors that cannot be built into the Map Light and must be supplied by the person or persons using this product.

Important Notice: If you have questions regarding the installation or operation of the FlightLights Map Light, or just need another manual, please call or write Fresh Aero Aviation at the at the contact numbers or e-mail address on the last page of this Guide. Manuals are also available on our web site in PDF format at www.freshaero.com.

Other Legal Notices

Fresh Aero Aviation makes no representations or warranties regarding any damages, injuries or benefit expected by using this unit lawfully, or any request from a third person, which are caused by the inappropriate use of this product.

Fresh Aero FlightLights LED Map Light for Grumman AA5 Series Aircraft

Copyright 2012

Fresh Aero Aviation reserves all rights to this manual including the right to alter the features and contents of this publication without obligation or advance notice.

FlightLights LED Map Light for Grumman AA5 series Aircraft

3 year Limited Warranty

Fresh Aero Aviation makes every effort to provide high quality and durable products to the aviation community and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 3 years from the date of purchase. This warranty does not apply to damage due directly or indirectly to misuse, abuse, negligence or accidents; repairs or alterations outside our facilities; or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation defect or problem must be included with the product. If inspection verifies the defect, we will either repair or replace the product at our discretion or may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return the repaired or replaced product at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then the purchaser must bear the cost of returning the product.

This warranty gives you specific rights and you may also have other rights which vary from state to state.

Fresh Aero Aviation, 1142 Roseland Drive, Columbia, TN 38401
Phone: 931-381-6092 888-581-4952 931-215-8801
Email: info@freshaero.com www.freshaero.com

Fresh Aero FlightLights LED Map Light for Grumman AA5 Series Aircraft

Installing the FlightLights Map Light



WARNING

Read and understand all the proceeding safety precautions and warnings before installing the Map Light

Read FAA Approval Information on the last page of this guide

1. Installing the FlightLights Map Light

- 1.1 Remove existing map light housing by turning the housing counterclockwise, unscrewing the housing from the gooseneck

Note: The housing normally holds a spring bulb retainer in place over the incandescent bulb to prevent the the bulb from turning. Remove this spring along with the housing.

- 1.2 Remove the incandescent bulb by turning the bulb counterclockwise. Now would be a good time to apply a little contact cleaner/corrosion preventive like “Corrosion X” or “ACF-50” to the bulb socket contacts on the gooseneck to insure a good, long lasting electrical connection.
- 1.3 Touch a metal surface to dissipate any static electricity and remove Map Light from plastic bag
- 1.4 Screw the open end of the Map Light into the bulb socket until resistance is felt. Hand tighten slightly only. Do not over tighten – very important!

Note: The FlightLights Map Light housing does not screw onto the external threads on the gooseneck end. The housing just slides over the threads as the inner LED bulb threads are screwed into the bulb socket.

Note: The internal “O” ring showing in the open end of the Map Light should lightly compress against the face of the gooseneck socket when the Map Light is tightened. This provides friction and prevents the Map Light from turning and loosening. If this compression resistance is not felt when tightening the Map Light, remove the unit and push one of the spare “O” rings included with the Map light (in plastic bag) over and down the internal bulb threads. Screw the Map Light on the gooseneck again and feel for the compression resistance. Use other spare “O” ring if necessary.

- 1.5 When proper resistance is felt, turn map light switch on and check light for proper operation. That’s it -- you’re done!

Fresh Aero FlightLights LED Map Light for Grumman AA5 Series Aircraft

A Few Words on FAA Approval

We consider the FlightLights Map Light unit to be a definite improvement in Grumman cockpit lighting. Intrinsic safety and easy installation with absolutely no modifications to the airframe or electrical system make the Map Light a perfect replacement for the existing incandescent map light.

But even some minor modifications to certified aircraft need some type of FAA approval to be legally used in the aircraft.

If you install the Map Light unit in your aircraft, you may need at least a FAA field approval to be completely legal and airworthy. The FAA people we have talked with consider the installation of this unit a very minor modification that would be approved using the field approval process. (337 form). Some even consider it to be a “non-issue”, no more than replacing an old light bulb with a more efficient one. The Fresh Aero Map Light average current draw is only 73.8 milliamperes – considerably less than the original Grumman map light incandescent bulb.

Please contact your district FAA Flight Standards Office for more information.

Fresh Aero Map Light Current Draw Specifications

Input Voltage – 13.8 vdc

Red – 82 milliamperes (.082 amps)
Blue – 70 milliamperes (.070 amps)
Green – 74 milliamperes (.074 amps)
White – 69 milliamperes (.069 amps)

Fresh Aero Aviation, 1142 Roseland Drive, Columbia, TN 38401
Phone: 931-381-6092 888-581-4952 931-215-8801
Email: info@freshaero.com www.freshaero.com