



**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AND INSTALLATION  
PHOTOLUMINESCENT AISLE PATH MARKING SYSTEM**

**AIRBUS A319-100, A320-100 / -200, A321-100 / -200 & A330 -200 / -300SERIES**

**STC ST02292AT**

**MANUAL NO. : L67-10**

**REVISION: F**

**DATE: March 7, 2008**

Modification of an aircraft by this Supplemental Type Certificate obligates the operator to include the maintenance information provided by this document in the operator's Aircraft Maintenance Manual and the Aircraft's Scheduled Maintenance Program



**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AND INSTALLATION****Log of Revisions**

REV	DATE	DESCRIPTION	APPROVAL
IR	2/1/01	Initial Release	<i>Derrick P. Seys</i>
A	2/20/01	Added note to cover.	<i>Derrick P. Seys</i>
B	12/15/02	Added A321 aircraft, SuperSeal and Encapsulated casing systems. Changed title from "Installation Instructions and Maintenance Manual" to "Instructions for Continued Airworthiness and Installation," revised charging information (added table), clarified maintenance intervals and requirements of 33-60-14 and added inspection forms. Added 33-60-15. Listed Trichloroethane as fluid to avoid in 33-60-14 (E). Formatted for two-sided pages. Reissued.	<i>Derrick P. Seys</i>
C	1/28/03	Revised sample in Table 2. Corrected minor errors. Added 33-60-14 paragraph K.	<i>Derrick P. Seys</i>
D	5/6/04	Updated contact info, replaced "manufacturer's MEL" with "manufacturer's limitations" corrected minor errors, "can be" was "may be" in reference to inoperative or missing equipment. Removed reqm'ts for markings from 33-60-14 (C) and inspections. Removed light inspections for "original values" and clarified process for minimum lighting inspection of 33-60-12. SG8191-1 was SG9930 part number. Reissued.	<i>Derrick P. Seys</i>
E	4/4/06	Added information on SuperSeal Lite Track System and Colored Inserts (SG 9999 and SG 8504). Removed references to marker inserts (SG 9341/ 9342/ 9345) that are no longer in use, replaced with references to self-adhesive markers(SG 9954/ 9952/ 9951/ 9950). Added encapsulated test coupon segment to be SG 8191-3.	<i>William B. Cotney Jr.</i>
F	3/7/08	Added Superseal Lite Overcarpet track, SG 8614, and Overcarpet track end caps, SG 8674, as an installation option to be used with the Superseal Lite track installation.	<i>William B. Cotney Jr.</i>



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**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AND INSTALLATION****14. CONTINUED AIRWORTHINESS AND MAINTENANCE REQUIREMENTS**

- A. The photoluminescent escape path system consists of two systems; a floor mounted photoluminescent track system to guide evacuating passengers to the exit and an electrically operated exit marker system at the exit to allow for evacuees to identify the exit.
1. The overhead cabin lighting and ambient light charge the photoluminescent compound. The primary charging source is the cabin overhead illumination. This system is activated for system charging as noted in Table 1. These procedures and limitations are to be incorporated into the airline or operator's procedures and approved maintenance program.
  2. Maintenance of the floor track system includes routine inspection and simple cleaning. The floor level system requires no electrical circuits to operate and this virtually eliminates maintenance of the track system. The track system requires periodic cleaning and daily inspection to ensure it is intact. The overhead lighting system is to be maintained per the applicable maintenance manual within the limitations 33-60-12 (B). The cabin lighting is critical to the performance of the system and it **MUST BE PROPERLY MAINTAINED**. Refer to manufacturer's Maintenance Manual Chapter 33 for procedures specific to the equipment. Daily, 6000 hour / 18 month, 12000 FH / 36 month, and 10 year inspections and servicing are to be accomplished per paragraph B of this section. These procedures (or similar) are to be incorporated into the airlines operating and maintenance planning documents.
  3. The electrically operated exit markers and all components are to be maintained per the manufacturer's maintenance documents and in accordance with the manufacturer's limitations. All required checks and intervals specified by the manufacturer take precedent over those noted herein.

**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AND INSTALLATION****Table 1. Approved Procedures – Photoluminescent Charge and Operational Durations**

CHARGE	PAX On Board	Bin Door Position	Charge Duration (minutes)	Operational Duration (begins when lights are extinguished)
I N I T I A L	N O N E	CLOSED	15	5.75 Hours
			30	7.5 Hours
			45	12.0 Hours
		OPEN	-	-
			-	-
			-	-
S U B S E Q U E N T	N O N E	CLOSED	15	7.5 Hours
			30	10.0 Hours
		OPEN	-	-
			30	5.0 Hours
	S E A T E D	CLOSED	-	-
			-	-
		OPEN	-	-
			-	-
NOTES:				
1. DURING CHARGING, CABIN ACTIVITY IS LIMITED TO MINOR AISLE TRAFFIC OF CREW AND PERSONNEL. PASSENGER BOARDING MAY SHADOW THE SYSTEM DURING CHARGING AND IS NOT ALLOWED DURING THE REQUIRED CHARGE TIME. THE CABIN AISLE MUST BE CLEAR OF OBSTRUCTIONS DURING CHARGE.				
2. Operational Duration not limited if daylight ambient conditions exist throughout flight or if cabin lighting is operated on the “ON” or BRIGHT” settings. Bright setting only applicable to switches having a ‘DIM’ or ‘NIGHT’ setting.				
3. Operation Duration begins when cabin lights are extinguished following applicable charge scenario.				
4. Cabin lighting and inoperative lamps to meet limitations of 33-60-12 (D) during charging.				

**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AND INSTALLATION****B. INSPECTION REQUIREMENTS**

All inspections are general visual (unless otherwise noted). The limitations may not be combined to increase permissible damage. However, multiple damage and types may be considered acceptable if within the constraints of the least acceptable limit. The intervals and inspections are listed on the following pages. These inspections are to be incorporated into the operator's maintenance program. The checklists shown or similar approved forms may be used.

1. The photoluminescent elements (SG 9422 or SG 8503) are identified on the underside with the part number and a batch number. The batch number (98/2344 for example) is used to track the system elements and is used in conjunction with the SG 9444, SG 8544, or SG 8191-3 test coupons to monitor the coating performance during its service life. The test coupon is a piece of the track located in the forward cabin and measures 200 mm (7.87 inch) or a 6 inch segment from the encapsulated system, or a 12 inch segment cut from the mounted components (superseal or superseal lite). A filler section is to be installed while the test coupon is submitted to STG for evaluation. For the SuperSeal, SuperSeal Lite, and Encapsulated systems, a forward segment of the system is to be removed and a temporary replacement installed. These segments are to be appropriately identified upon initial removal.
2. Current service life is 10 years and is periodically monitored in accordance with the maintenance program using coupon monitoring (SG 9444 / SG 8544 / SG 8191-3 or representative segment). Refer to the operator specific warranty or contact SafTGlo for details.

## INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AND INSTALLATION

### B. MAINTENANCE LIMITATIONS AND INTERVALS (CON'T)

#### 3. Daily General Visual Inspection and Servicing

*Note: Aircraft power is required for this inspection and servicing.*

Date: _____		Flight: _____ Aircraft: _____	
Inspector: _____		Employee / ID Number: _____	
ITEM TO INSPECT	LIMITS / ACTION	UNSATISFACTORY	SATISFACTORY
<b>Floor Mounted Components</b>			
Top Cover / Casing	Less than 10% of any 48-inch (1.22 m) length can be stained, cracked, or damaged. Missing or damaged edge flanges acceptable provided inner elements remain secure	Clean or replace damaged section	
Photoluminescent Elements	Less than 10% of any 48-inch (1.22 m) length can be missing, stained, or damaged.	Clean or replace damaged section	
Exit Indicators (arrows, etc.) at mid-cabin exits	Missing items acceptable provided photoluminescent insert is intact	Replace damaged items	
End Indicators (dot markers)	Missing items acceptable provided photoluminescent insert is intact	Replace damaged items	
End Caps or Ramps	Damage is acceptable if inner elements / inserts remain secured (not applicable to encapsulated components)	Replace damaged or missing article	
<b>Interior Lighting</b>	(refer to 33-60-12)		
LH Ceiling	Number Inoperative _____ Number Operative + _____ Total _____ 10% of Total = _____ Acceptable if 10% or less are inoperative	Replace or repair inoperative lamps per aircraft MM chapter 33.	
RH Ceiling	Number Inoperative _____ Number Operative + _____ Total _____ 10% of Total = _____ Acceptable if 10% or less are inoperative	Replace or repair inoperative lamps per aircraft MM chapter 33.	
Overall Lighting	No more than two adjacent lamps are inoperative.	Replace or repair inoperative lamps	
Inoperative Ceiling Lamps at Life raft area	All lights must operate.	Replace or repair inoperative lamps	
Missing Electrically Illuminated Exit Marker	All Marker assemblies required	Replace or repair inoperative lamps	
<b>SERVICE SYSTEM</b>	<b>ACTION</b>		
<b>System Charge</b>	Verify or perform initial daily charge per approved procedures by activating cabin lighting	Repeat Charge	

**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AND INSTALLATION****B. MAINTENANCE LIMITATIONS AND INTERVALS (CON'T)****4. 6000 Flight Hour or 18 Month inspection**

*Accomplish the following before 6,000 Flight Hours or 18 months (whichever comes first) and every 6,000 FH / 18 months thereafter.*

Date: _____ Inspector: _____		Aircraft: _____ TAT: _____	
ITEM TO INSPECT	LIMITS / ACTION	UNSATISFACTORY	SATISFACTORY
<b>Floor Mounted Components</b>			
Top Cover / Casing	Less than 10% of any 48-inch (1.22 m) length can be stained, cracked, or damaged. Missing or damaged edge flanges acceptable provided inner elements remain secure	Clean or replace damaged section	
Bottom Track	Acceptable if less than 6 inches (152 mm) missing provided remainder is intact and top cover is secured. (not applicable to Encapsulated system or SuperSeal or SuperSeal Lite)	Clean or replace damaged section	
Photoluminescent Elements	Less than 10% of any 48-inch (1.22 m) length can be missing, stained, or damaged.	Clean or replace damaged section	
Exit Indicators (arrows, etc.) at mid-cabin exits	Missing items acceptable provided photoluminescent insert is intact	Replace damaged article	
End Indicators (dot markers)	Missing items acceptable provided photoluminescent insert is intact	Replace damaged article	
End Caps or Ramps	Damage is acceptable if inner elements / inserts remain secured (not applicable to Encapsulated system).	Replace damaged or missing article	

**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AND INSTALLATION****5. 6000 Flight Hour or 18 Month Servicing – Cleaning**

*Accomplish the following before 6,000 Flight Hours or 18 months  
(whichever comes first) and every 6,000 FH / 18 months thereafter.*

Date: _____ Inspector: _____		Aircraft: _____ TAT: _____	
ITEM TO SERVICE	ACTION	UNSATISFACTORY	SATISFACTORY
Clean Top Cover	Clean per § E of 33-60-14	Repeat cleaning or replace part	
Clean Photoluminescent Insert	Clean per § E of 33-60-14. (not applicable to Encapsulated, SuperSeal, or SuperSeal Lite systems))	Repeat cleaning or replace part	

**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AND INSTALLATION****6. 6000 Flight Hour or 18 Month Functional Check**

*Accomplish the following before 6,000 Flight Hours or 18 months (whichever comes first) and every 6,000 FH / 18 months thereafter.*

**Note:** Aircraft power is required for this check.

Tools Required:

1. Measuring tape
2. Light Meter (see 33-60-12)

Date: _____ Inspector: _____		Aircraft: _____ TAT: _____	
ITEM TO CHECK	ACTION	UNSATISFACTORY	SATISFACTORY
<b>Interior Lighting</b>			
Overall Ceiling Lighting	Measure and record using survey procedures of 33-60-12 to ensure 30 LUX limitations.	Clean lamps and lenses or repair inoperative items and repeat measurements	
Inoperative Ceiling Lamps at Life raft area	All lights must operate.	Replace or repair inoperative lamps	
Missing Electrically Illuminated Exit Marker	All Marker assemblies required.	Replace inoperative bulbs and assy.	

**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS AND INSTALLATION****7. 12000 Flight Hour or 36 Month Inspection and Functional Check**

*Accomplish the following before 12,000 Flight Hours or 36 months (whichever comes first) and every 12,000 FH / 36 months thereafter.*

**Note:** The following inspection is to be performed by the product manufacturer (STG Aerospace). The initial SG 9444 / SG 8544 Test Coupon or 12-inch (30cm) segment (SuperSeal, SuperSeal Lite) or 6-inch segment (SG 8191-3 for Encapsulated) will be examined to ensure coating still meets performance standards.

Date: _____ Inspector: _____		Aircraft: _____ TAT: _____	
ITEM TO INSPECT	LIMITS / ACTION	UNSATISFACTORY	SATISFACTORY
Test Coupon (fwd RH cabin)	Operator to return test coupon of initial installation to STG for Operator's fleet evaluation to ensure coating performance acceptability.	Contact STG for disposition.	

**8. 10 Year Inspection and Functional Check**

**Note:** The following inspection is to be performed by the product manufacturer (STG Aerospace). The initial SG 9444 / SG 8544 Test Coupon or 12-inch (30cm) segment (SuperSeal, SuperSeal Lite) or 6-inch segment (SG 8191-3 for Encapsulated) will be examined to ensure coating still meets performance standards after 10 years of service and every 10 years thereafter.

Date: _____ Inspector: _____		Aircraft: _____ TAT: _____	
ITEM TO INSPECT	LIMITS / ACTION	UNSATISFACTORY	SATISFACTORY
Test Coupon (fwd RH cabin)	Operator to return test coupon of initial installation to STG for Operator's fleet evaluation to ensure coating performance acceptability.	Replace photoluminescent elements.	