

# King Air 90/100/200 LED Upgrades

**46%** Weight Reduction  
Per Fixture

**40%** Lower System  
Operating  
Temperatures

**30%** Reduction  
in Operating Current



(90/100/200 Series)

## ADVANTAGES:

- Direct “Fit, Form, and Function” Replacement for Fluorescent Lighting Systems
- Uses Existing Aircraft Wire Harness and On/Off Dim Switch
- Reduced EMI Emissions
- 46% Weight Reduction Per Fixture
- 30% Reduction in Operating Current
- 40% Lower System Operating Temperatures
- No High Voltage

## LED LIGHTING INTERIOR UPGRADE

PWI’s Complete LED Upgrade for the King Air 90s, 100s, and 200s is a product of innovation and technology, combined to reduce weight and current draw while increasing the life span and reliability of the lighting system. The LED Upgrade is equivalent in “fit, form, and function” to the current fluorescent system and maintains all the desirable characteristics of fluorescents while offering the advantages of LEDs.

### CERTIFICATIONS:

- FAA/STC - SA01748WI
- EASA STC - 10051015
- PMA #PQ4159CE

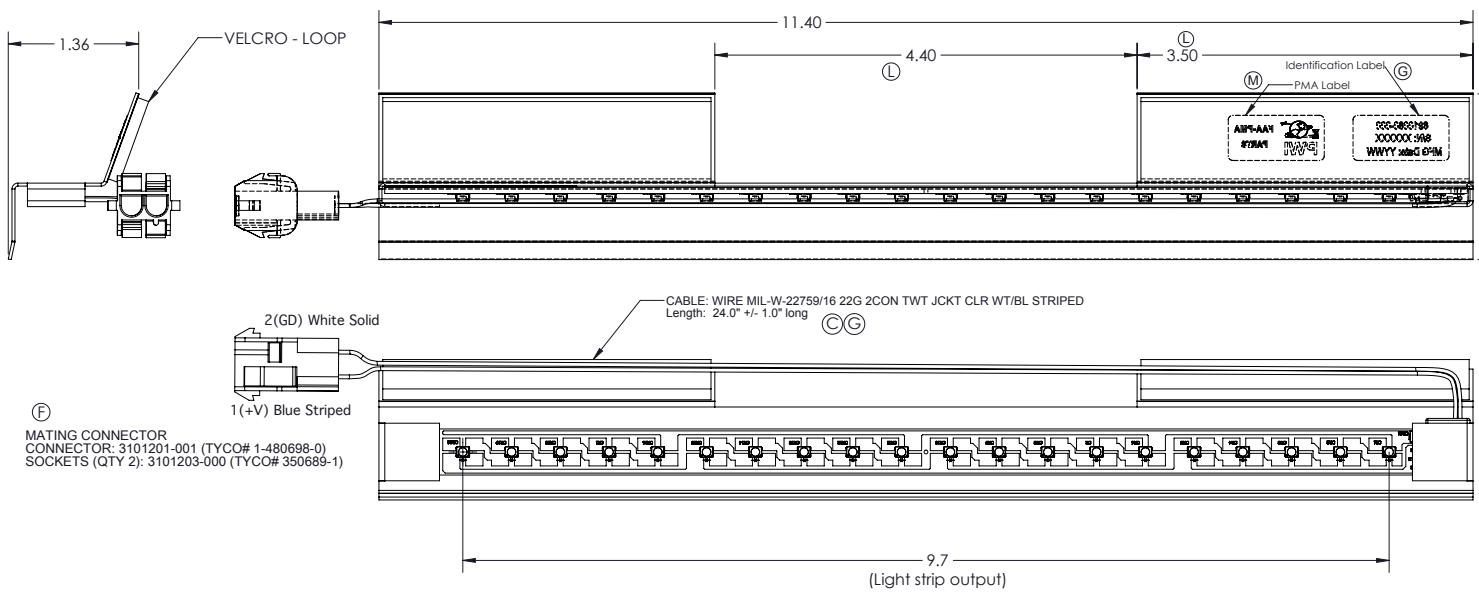


Be BRILLIANT.®

**PROPRIETARY INFORMATION**  
THE FURNISHING OF THIS DOCUMENT DOES NOT CONVEY ANY REPRODUCTION OR MFG. RIGHTS.

ENG-RELEASED ER150 6/28/13 W.A.S.

REV.	DESCRIPTION	DATE	APPROVED
B	Change per ECN819	3/12/13	W.A.S.
C	Change per ECN846	7/17/13	W.A.S.
D	Change per ECN849	7/19/13	W.A.S.
E	Change per ECN852	8/8/13	W.A.S.
F	Change per ECN853	8/12/13	R.B.
G	Change per ECN856	9/11/13	W.A.S.
H	Change per ECN864	9/23/13	R.B.
J	Change per ECN867	9/24/2013	R.B.
K	Change per ECN868	9/24/2013	R.B.
L	change per ECN879	12/4/2013	W.A.S.
M	Change per ECN957	2/2/2016	C.W.



**MATING CONNECTOR**  
CONNECTOR: 3101201-001 (TYCO# 1-480698-0)  
SOCKETS (QTY 2): 3101203-000 (TYCO# 350689-1)

6910080-000				
SPECIFICATIONS	MIN.	TYP	MAX.	UNITS
INPUT VOLTAGE DC	17	28	32	VDC
INPUT CURRENT DC	188	124	110	MA
WEIGHT		2.59		OZ.
OPERATING TEMPERATURE	-20±		+55±	°C

UNLESS OTHERWISE SPECIFIED DIM ARE IN INCHES  
TOL ON ANGLE ± 25°  
1 PL ± .1" 2 PL ± .03"  
3 PL ± .010" 4 PL ± .0050"  
INTERPRET DIM AND TOL PER ASME Y14.5M-1994

ADDITIONAL INFO:  
Software: Solidworks 2013 SP3.0  
ISSUED BY: W.A.S. 12/16/11  
DRAWN BY: J. Dowley 5/31/12  
MFG CHK BY: R.B. 9/26/12  
CHECKED BY: W.A.S. 9/26/12  
ENG APR BY: W.A.S. 10/15/12

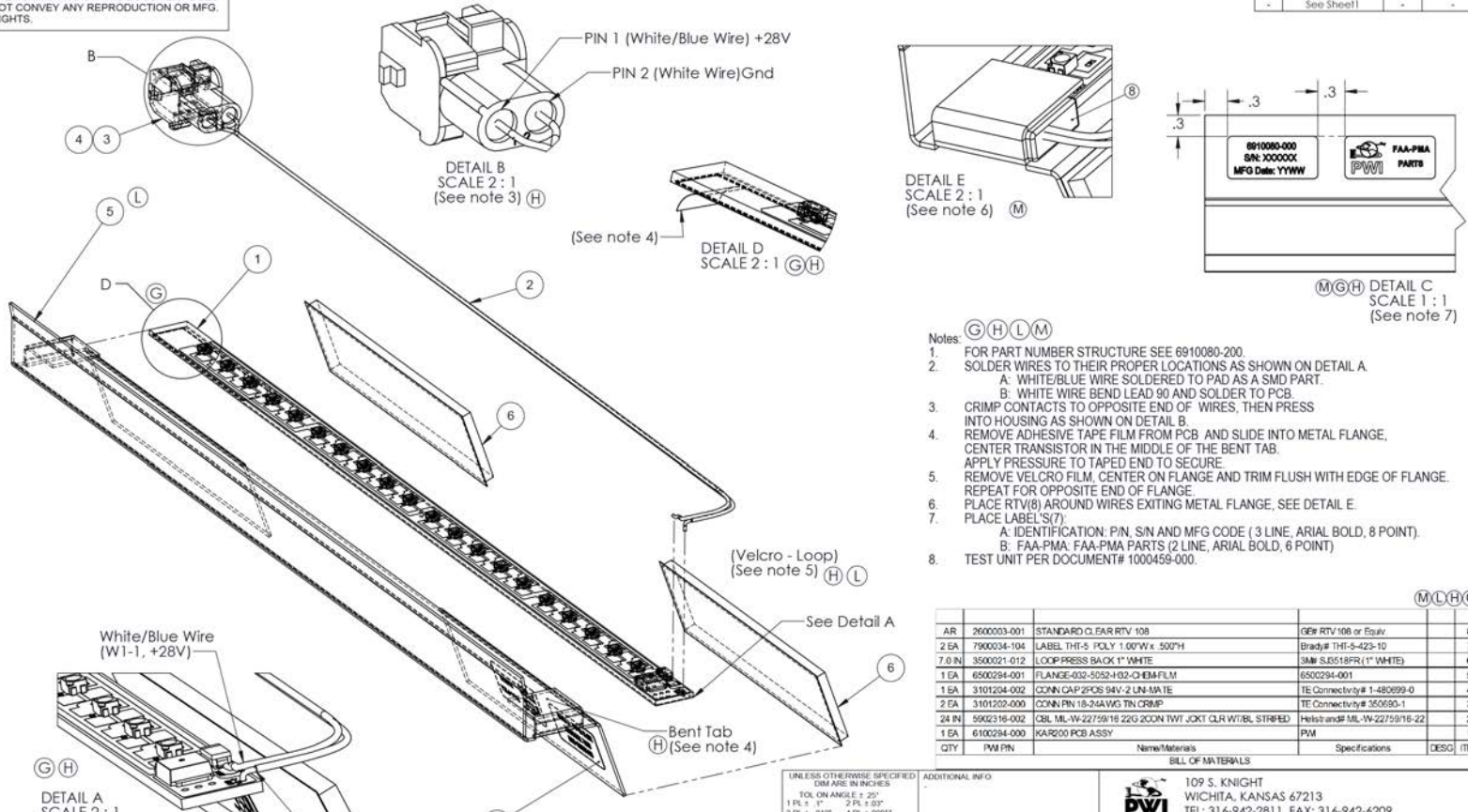
109 S. KNIGHT  
WICHITA, KANSAS 67213  
TEL: 316-942-2811 FAX: 316-942-6209

**KAR200 LIGHT ASSEMBLY**

SIZE B	CAGE CODE 33497	DRAWING NO. 6910080-000	REV M
SCALE 1:1	EST. WGT	Weight	SHEET 1 OF 2

**PROPRIETARY INFORMATION**  
THE FURNISHING OF THIS DOCUMENT DOES NOT CONVEY ANY REPRODUCTION OR MFG. RIGHTS.

REV.	DESCRIPTION	DATE	APPROVED
-	See Sheet 1	-	-



- Notes: (G, H, L, M)
- FOR PART NUMBER STRUCTURE SEE 6910080-200.
  - SOLDER WIRES TO THEIR PROPER LOCATIONS AS SHOWN ON DETAIL A.  
A. WHITE/BLUE WIRE SOLDERED TO PAD AS A SMD PART.  
B. WHITE WIRE BEND LEAD 90 AND SOLDER TO PCB.
  - CRIMP CONTACTS TO OPPOSITE END OF WIRES, THEN PRESS INTO HOUSING AS SHOWN ON DETAIL B.
  - REMOVE ADHESIVE TAPE FILM FROM PCB AND SLIDE INTO METAL FLANGE, CENTER TRANSISTOR IN THE MIDDLE OF THE BENT TAB. APPLY PRESSURE TO TAPED END TO SECURE.
  - REMOVE VELCRO FILM, CENTER ON FLANGE AND TRIM FLUSH WITH EDGE OF FLANGE. REPEAT FOR OPPOSITE END OF FLANGE.
  - PLACE RTV(B) AROUND WIRES EXITING METAL FLANGE, SEE DETAIL E.
  - PLACE LABEL(S):  
A. IDENTIFICATION: P/N, SN AND MFG CODE (3 LINE, ARIAL BOLD, 8 POINT).  
B. FAA-PMA: FAA-PMA PARTS (2 LINE, ARIAL BOLD, 6 POINT)
  - TEST UNIT PER DOCUMENT# 1000459-000.

AR	2600003-001	STANDARD CLR RTV-108	GER RTV-108 or Equiv	8
2 EA	7900034-104	LABEL TH1-5 POLY 1.00"W x .500"H	Brady# TH1-5-423-10	7
7.0 IN	3500021-012	LOOP-PRESS BACK 1" WHITE	3M# SLS18FR(1" WHITE)	6
1 EA	6500294-001	FLANGE-032-5052-032-Q-EM-FILM	6500294-001	5
1 EA	3101204-002	CONN CAP 2PCB 94V-2 LIN-MATE	TE Connectivity# 1-480899-0	4
2 EA	3101202-000	CONN PIN 18-24AWG TIN CRIMP	TE Connectivity# 350689-1	3
24 IN	5002316-002	CSL MIL-W-22759/16 22G 2CON TWT JCKT CLR WT/BL STRIPED	Hellstrand# MIL-W-22759/16-22	2
1 EA	6100284-000	KAR200 PCB ASSY	P/M	1
QTY	P/M P/N	Name/Materials	Specifications	DESC ITEM

UNLESS OTHERWISE SPECIFIED DIM ARE IN INCHES  
TOL ON ANGLE ± 25°  
1 PL ± .1" 2 PL ± .03"  
3 PL ± .010" 4 PL ± .0050"  
INTERPRET DIM AND TOL PER ASME Y14.5M-1994

ADDITIONAL INFO:  
Software: Solidworks 2013 SP3.0  
ISSUED BY: W.A.S. 12/16/11  
DRAWN BY: J. Dowley 5/31/12  
MFG CHK BY: R.B. 9/26/12  
CHECKED BY: W.A.S. 9/26/12  
ENG APR BY: W.A.S. 10/15/12

109 S. KNIGHT  
WICHITA, KANSAS 67213  
TEL: 316-942-2811 FAX: 316-942-6209

**KAR200 LIGHT ASSEMBLY**

SIZE B	CAGE CODE 33497	DRAWING NO. 6910080-000	REV M
SCALE 1:1	EST. WGT	Weight	SHEET 2 OF 2