REVISION TRANSMITTAL

This sheet transmits Revision 1 to MTB-31-03, which:

A. Inserted new Steps: 4. C, 8. F., and 9. A. thru 9. F.

B. Corrections made to Steps: 4. A., 5, 5. D., 5. E., 5. G., 6. C., 6. E., 7. D., 7. F., and 8. F.

C. Updated Material Information Section.

D. Corrections made to Illustrations: Figure 1: Sheet 1, Sheet 2, and Sheet 4.

E. Inserted new Illustrations: Figure 1 Sheet 6 thru 8.

F. Included serial numbers FM-36 thru FM-65 for the model B300C.

NOTE: This revision replaces the original issue of MTB-31-03.

REVISION COMPLIANCE

NO EFFECT. Airplanes previously modified by this service letter are not affected.

LOG OF REVISIONS

Original Issue	August 09, 2023
Revision 1	January 16, 2024

Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

TITLE

INDICATING/RECORDING SYSTEMS - POTENTIOMETER REPLACEMENT

EFFECTIVITY

MODEL	SERIAL NUMBERS
300/300LW	FA-1 thru FA-230
B300	FL-1 thru FL-380, FL-382, FL-601, FL-672, FL-688 thru FL-1195
B300C	FM-1 thru FM-11, FM-36 thru FM-65
1900	UA-2, UA-3
1900C	UB-1 thru UB-74, UC-1 thru UC-174
1900D	UE-1 thru UE-439

REASON

The CM41172 Potentiometer is obsolete and is replaced with the KS4U1031F28 Potentiometer.

DESCRIPTION

This service document provides parts and instructions to remove and replace the potentiometer from the overhead panel assembly.

COMPLIANCE

OPTIONAL. This service document can be accomplished at the discretion of the owner.

A service document published by Textron Aviation may be recorded as *completed* in an aircraft log only when the following requirements are satisfied:

1) The mechanic must complete all of the instructions in the service document, including the intent therein.
2) The mechanic must correctly use and install all applicable parts supplied with the service document kit. Only with written authorization from Textron Aviation can substitute parts or rebuilt parts be used to replace new parts.
3) The mechanic or airplane owner must use the technical data in the service document only as approved and published.
4) The mechanic or airplane owner must apply the information in the service document only to aircraft serial numbers identified in the *Effectivity* section of the document.
5) The mechanic or airplane owner must use maintenance practices that are identified as acceptable standard practices in the aviation industry and governmental regulations.

No individual or corporate organization other than Textron Aviation is authorized to make or apply any changes to a Textron Aviation-issued service document or flight manual supplement without prior written consent from Textron Aviation.

Textron Aviation is not responsible for the quality of maintenance performed to comply with this document, unless the maintenance is accomplished at a Textron Aviation-owned Service Center.

Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800

APPROVAL

Textron Aviation received FAA approval for the technical data in this publication that changes the airplane type design.

FLIGHT CREW OPERATIONS

No Changes

CONSUMABLE MATERIAL

You must use the consumable materials that follow, or their equivalent, to complete this service document.

NAME	NUMBER	MANUFACTURER	USE
Color Chemical Film Treatment	U074093 (Alodine 1132 Touch n Prep)	Textron Aviation Parts Distribution 7121 Southwest Boulevard Wichita, KS 67215	To prepare bare aluminum surface for intermediate primer. Bonderite M-CR 1132, (formerly the Alodine 1132 Touch-n-prep) are both approved for small touch up areas, generally less than 6 inches square.)

TOOLING

No specialized tooling is required to complete this service document.

WEIGHT AND BALANCE INFORMATION

Negligible

REFERENCES

Beechcraft 300/300LW Maintenance Manual

Beechcraft Super King Air Model B300/B300C Maintenance Manual

Beechcraft Super King Air Model B300/300C Fusion Maintenance Manual

Beechcraft Model 1900/1900C Airliner Maintenance Manual

Beechcraft Model 1900D Airliner Maintenance Manual

Beechcraft King Air Chapter 20 Standard Practice - Airframe

PUBLICATIONS AFFECTED

Beechcraft 300/300LW Maintenance Manual

Beechcraft 300/300LW Wiring Diagram Manual

Beechcraft 300/300LW Illustrated Parts Catalog

Beechcraft Super King Air Model B300/B300C Maintenance Manual

Beechcraft B300 Electrical Wiring Diagram Manual

Beechcraft B300/B300C Illustrated Parts Catalog FL-1 thru FL-600, FL-602 thru FL-671, FL-673 thru FL-687; FM-1 thru FM-35

Beechcraft Super King Air Model B300/B300C Fusion Maintenance Manual

Beechcraft Super King Air Model B300/B300C Fusion Wiring Diagram Manual

Beechcraft B300/300C Illustrated Parts Catalog FL-601, FL-672, FL-688 and After, FM-36 and After

Beechcraft Model 1900/1900C Airliner Maintenance Manual

Beechcraft Model 1900C Wiring Diagram Manual

Beechcraft Model 1900/1900C Illustrated Parts Catalog UA-1 and After, UB-1 and After

Beechcraft Model 1900D Airliner Maintenance Manual

Beechcraft Model 1900D Airliner Wiring Diagram Manual

Beechcraft Model 1900D Airliner Illustrated Parts Catalog

ACCOMPLISHMENT INSTRUCTIONS

1. Prepare the airplane for maintenance.
   A. Make sure that the airplane is electrically grounded.
   B. Make sure that all switches are in the OFF/NORM position.
   C. Disconnect electrical power from the airplane.
      (1) Disconnect external electrical power.
      (2) Disconnect the airplane battery.
   D. Attach maintenance warning tags to the battery and external power receptacle that have **"DO NOT CONNECT ELECTRICAL POWER - MAINTENANCE IN PROGRESS"** written on them.
2. Remove the overhead electroluminescent panel. (Refer to the applicable Maintenance Manual, Chapter 33, Electroluminescent Panel - Removal/Installation.)
3. Remove the screws that attach the overhead instrument panel assembly to the overhead panel assembly. (Refer to the applicable Maintenance Manual, Chapter 31, Overhead Instrument Panel - Removal/Installation.)
   A. Keep the screws and overhead instrument panel assembly.
4. Depending upon the customer's airplane model and serial number, go to the steps as follows:
   A. For B300 model airplanes with serial numbers FL-954, FL-1010, FL-1031 thru FL-1195, go to Step 5.
   B. For B300 model airplanes with serial numbers FL-1 thru FL-382 and B300C model airplanes with serial numbers FM-1 thru FM-11 and all 300/300LW model airplanes, go to Step 6.
   C. For B300 model airplanes with airplane serial numbers FL-601, FL-672, FL-688 thru FL-953, FL-955 thru FL-1009, FL-1011 thru FL-1030 and B300C model airplane serial numbers FM-36 thru FM-65, go to Step 9.
   D. For all 1900/1900C model airplanes, go to Step 7.
   E. For all 1900D model airplanes, go to Step 8.
5. (Refer to Figure 1, Sheet 1.) For B300 model airplanes with serial numbers FL-954, FL-1010, FL-1031 thru FL-1195, do as follows:
   A. Remove the R9 and R11 CM41172 Potentiometers from the overhead panel assembly as follows:
      (1) Keep the two dimming control knobs.
      (2) Remove and keep the nut and the locking ring that attach the two CM41172 Potentiometers from the overhead panel assembly.
      (3) Identify the wires and the terminals from the two CM41172 Potentiometers.

          NOTE: The potentiometer terminals can be hooks or lugs. The wire removal procedures are the same.

      (4) Use a soldering iron to disconnect the wires from the two potentiometer terminals.
      (5) Remove and keep the nut and the key washer from the two CM41172 Potentiometers.
      (6) Remove and discard the two CM41172 Potentiometers from the overhead panel assembly.

B. (Refer to Figure 1, Sheet 1 Detail C.) Drill the new keyholes into the 434-364072 Overhead Panel as follows:

(1) Locate and drill the two Number 28 (0.140 inch diameter) holes into the overhead panel

(2) Debur the drilled holes.

(3) Apply Color Chemical Film Treatment to all bare metal.

(4) Using an indelible marker, relabel the 434-364072 Overhead Panel as 130M365002-011.

C. (Refer to Figure 1, Sheet 1, Detail B.) Install the two KS4U1031F28 Potentiometers into the 130M365002-011 Overhead Panel as follows:

(1) Install the kept nut and the key washer onto the two KS4U1031F28 Potentiometers.

(2) Install the two KS4U1031F28 Potentiometers into the existing overhead panel assembly terminals and the two key washers into the new drilled holes.

(3) Install the kept locking rings and nuts onto the two KS4U1031F28 Potentiometers.

(4) Install kept dimming knobs and set screws onto the two KS4U1031F28 Potentiometers.

D. (Refer to Figure 1, Sheet 2.) Add and re-locate the wires to the R9 KS4U1031F28 Potentiometer as shown in Figure 1 Sheet 2.

(1) If the wiring to the new potentiometer needs to be extended then do as follows:

NOTE: It may be necessary to install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire to extend the wires to reach the terminal lugs.

(a) Install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire as required on the electrical wires for each KS4U1031F28 Potentiometer.

(b) Install the 106242C31 Heat Shrink Tubing over the newly extended wiring.

(c) Using a heat gun, install the 106242C31 Heat Shrink Tubing over the electrical wires as required.

(2) Use a soldering iron to connect the wires to each potentiometer terminal.

NOTE: The potentiometer terminals can be hooks or lugs. The wire installation procedures are the same.

E. (Refer to Figure 1, Sheet 2.) Add and re-locate the wires to the R11 KS4U1031F28 Potentiometer as shown in Figure 1 Sheet 2.

(1) If the wiring to the new potentiometer needs to be extended then do as follows:

NOTE: It may be necessary to install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire to extend the wires to reach the terminal lugs.

(a) Install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire as required on the electrical wires for each KS4U1031F28 Potentiometer.

(b) Install the 106242C31 Heat Shrink Tubing over the newly extended wiring.

(c) Using a heat gun, install the 106242C31 Heat Shrink Tubing over the electrical wires as required.

(2) Use a soldering iron to connect the wires to each potentiometer terminal.

NOTE: The potentiometer terminals can be hooks or lugs. The wire installation procedures are the same.

F. Using an indelible marker, relabel the modified wire harness as 130M365002-0013.

G. Go to Step 10.

6. (Refer to Figure 1, Sheet 4.) For B300 model airplanes with serial numbers FL-1 thru FL-382 and B300C model airplanes with serial numbers FM-1 thru FM-11, do as follows:

   A. Remove the R5 CM41172 Potentiometer from the overhead panel assembly as follows:

      (1) Keep the dimming control knob.

      (2) Remove and keep the nut and the locking ring that attach the CM41172 Potentiometer from the overhead panel assembly.

      (3) Identify the wires and the terminals from the CM41172 Potentiometer.

         NOTE: The potentiometer terminals can be hooks or lugs. The wire removal procedures are the same.

      (4) Use a soldering iron to disconnect the wires from the potentiometer terminals.

      (5) Remove and keep the nut and the key washer from the CM41172 Potentiometer.

      (6) Remove and discard the CM41172 Potentiometer from the overhead panel assembly.

   B. (Refer to Figure 1, Sheet 1, Detail B.) Install the KS4U1031F28 Potentiometer into the overhead panel as follows:

      (1) Install the kept nut and the key washer onto the KS4U1031F28 Potentiometer.

      (2) Install the KS4U1031F28 Potentiometer into the existing overhead panel assembly and the key washer into the existing key hole.

      (3) Install the kept locking ring and nut onto the KS4U1031F28 Potentiometer.

      (4) Install kept dimming knob and set screw onto the KS4U1031F28 Potentiometer.

   C. (Refer to Figure 1, Sheet 4.) Add and re-locate the wires to the R5 KS4U1031F28 Potentiometer as shown in Figure 1 Sheet 4.

      (1) If the wiring to the new potentiometer needs to be extended then do as follows:

         NOTE: It may be necessary to install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire to extend the wires to reach the terminal lugs.

         (a) Install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire as required on the electrical wires for each KS4U1031F28 Potentiometer.

         (b) Install the 106242C31 Heat Shrink Tubing over the newly extended wiring.

         (c) Using a heat gun, install the 106242C31 Heat Shrink Tubing over the electrical wires as required.

      (2) Use a soldering iron to connect the wires to each potentiometer terminal.

         NOTE: The potentiometer terminals can be hooks or lugs. The wire installation procedures are the same.

   D. Using an indelible marker, relabel the modified wire harness as 130M365002-0015.

   E. Go to Step 10.

7. (Refer to Figure 1, Sheet 3.) For all 1900/1900C model airplanes, do as follows:

   A. Remove the R1 CM41172 Potentiometer from the overhead panel assembly as follows:

      (1) Keep the dimming control knob.

      (2) Remove and keep the nut and the locking ring that attach the CM41172 Potentiometer from the overhead panel assembly.

(3) Identify the wires and the terminals from the CM41172 Potentiometer.

NOTE: The potentiometer terminals can be hooks or lugs. The wire removal procedures are the same.

(4) Use a soldering iron to disconnect the wires from the potentiometer terminals.

(5) Remove and keep the nut and the key washer from the CM41172 Potentiometer.

(6) Remove and discard the CM41172 Potentiometer from the overhead panel assembly.

B. (Refer to Figure 1, Sheet 1, Detail C.) Drill the new keyhole into the 114-320049 Overhead Panel as follows:

(1) Locate and drill the Number 28 (0.140 inch diameter) hole into the overhead panel

(2) Debur the drilled hole.

(3) Apply Color Chemical Film Treatment to all bare metal.

(4) Using an indelible marker, relabel the 114-310049 Overhead Panel as 130M365002-021.

C. (Refer to Figure 1, Sheet 1, Detail B.) Install the KS4U1031F28 Potentiometer into the 130M365002-021 Overhead Panel as follows:

(1) Install the kept nut and the key washer onto the KS4U1031F28 Potentiometer.

(2) Install the KS4U1031F28 Potentiometer into the existing overhead panel assembly and the key washer into the new drilled hole.

(3) Install the kept locking ring and nut onto the KS4U1031F28 Potentiometer.

(4) Install kept dimming knob and set screw onto the KS4U1031F28 Potentiometer.

D. (Refer to Figure 1, Sheet 3.) Add and re-locate the wires to the R1 KS4U1031F28 Potentiometer as shown in Figure 1 Sheet 3.

(1) If the wiring to the new potentiometer needs to be extended then do as follows:

NOTE: It may be necessary to install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire to extend the wires to reach the terminal lugs.

(a) Install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire as required on the electrical wires for each KS4U1031F28 Potentiometer.

(b) Install the 106242C31 Heat Shrink Tubing over the newly extended wiring.

(c) Using a heat gun, install the 106242C31 Heat Shrink Tubing over the electrical wires as required.

(2) Use a soldering iron to connect the wires to each potentiometer terminal.

NOTE: The potentiometer terminals can be hooks or lugs. The wire installation procedures are the same.

E. Using an indelible marker, relabel the modified wire harness as 130M365002-0023.

F. Go to Step 10.

8. (Refer to Figure 1, Sheet 5.) For all 1900D model airplanes, do as follows:

A. Remove the R2 CM41172 Potentiometer from the overhead panel assembly as follows:

(1) Remove and keep the setscrew from the dimming control knob.

(2) Keep the dimming control knob.

(3) Remove and keep the nut and the locking ring that attach the CM41172 Potentiometer from the overhead panel assembly.

(4) Identify the wires and the terminals from the CM41172 Potentiometer.

NOTE: The potentiometer terminals can be hooks or lugs. The wire removal procedures are the same.

(5) Use a soldering iron to disconnect the wires from the potentiometer terminals.

(6) Remove and keep the nut and the key washer from the CM41172 Potentiometer.

(7) Remove and discard the CM41172 Potentiometer from the overhead panel assembly.

B. (Refer to Figure 1, Sheet 1 Detail C.) Drill the new keyhole into the 129-364058 Overhead Panel as follows:

(1) Locate and drill the Number 28 (0.140 inch diameter) hole into the overhead panel

(2) Debur the drilled hole.

(3) Apply Color Chemical Film Treatment to all bare metal.

(4) Using an indelible marker, relabel the 129-364058 Overhead Panel as 130M365002-017.

C. (Refer to Figure 1, Sheet 1, Detail B.) Install the KS4U1031F28 Potentiometer into the 130M365002-017 Overhead Panel as follows:

(1) Install the kept nut and the key washer onto the KS4U1031F28 Potentiometer.

(2) Install the KS4U1031F28 Potentiometer into the existing overhead panel assembly and the key washer into the new drilled hole.

(3) Install the kept locking ring and nut onto the KS4U1031F28 Potentiometer.

(4) Install kept dimming knob and set screw onto the KS4U1031F28 Potentiometer.

D. (Refer to Figure 1, Sheet 5.) Re-locate the wires to the R2 KS4U1031F28 Potentiometer as shown in Figure 1 Sheet 5.

(1) If the wiring to the new potentiometer needs to be extended then do as follows:

NOTE: It may be necessary to install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire to extend the wires to reach the terminal lugs.

(a) Install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire as required on the electrical wires for each KS4U1031F28 Potentiometer.

(b) Install the 106242C31 Heat Shrink Tubing over the newly extended wiring.

(c) Using a heat gun, install the 106242C31 Heat Shrink Tubing over the electrical wires as required.

(2) Use a soldering iron to connect the wires to each potentiometer terminal.

NOTE: The potentiometer terminals can be hooks or lugs. The wire installation procedures are the same.

E. Using an indelible marker, relabel the modified wire harness as 130M365002-0019.

F. Go to Step 10.

9. (Refer to Figure 1, Sheet 6 thru 8.) For B300 model airplanes with serial numbers FL-601, FL-672, FL-688 thru FL953, FL-955 thru FL-1009, FL-1011 thru FL-1030 and for B300C model airplanes with serial numbers FM-36 THRU FM-65, do as follows:

A. Remove the R9 and R11 CM41172 Potentiometers from the overhead panel assembly as follows:

(1) Keep the two dimming control knobs.

(2) Remove and keep the nut and the locking ring that attach the two CM41172 Potentiometers from the overhead panel assembly.

(3) Identify the wires and the terminals from the two CM41172 Potentiometers.

NOTE: The potentiometer terminals can be hooks or lugs. The wire removal procedures are the same.

(4) Use a soldering iron to disconnect the wires from the two potentiometer terminals.

(5) Remove and keep the nut and the key washer from the two CM41172 Potentiometers.

(6) Remove and discard the two CM41172 Potentiometers from the overhead panel assembly.

B. (Refer to Figure 1, Sheet 1 Detail C.) Drill the new keyholes into the 130-364072 Overhead Panel as follows:

(1) Locate and drill the two Number 28 (0.140 inch diameter) holes into the overhead panel.

(2) Debur the drilled holes.

(3) Apply Color Chemical Film Treatment to all bare metal.

(4) Using an indelible marker, relabel the 130-364072 Overhead Panel as 130M365002-0029.

C. (Refer to Figure 1, Sheet 1, Detail B.) Install the two KS4U1031F28 Potentiometers into the 130M365002-0029 Overhead Panel as follows:

(1) Install the kept nut and the key washer onto the two KS4U1031F28 Potentiometers.

(2) Install the two KS4U1031F28 Potentiometers into the existing overhead panel assembly terminals and the two key washers into the new drilled holes.

(3) Install the kept locking rings and nuts onto the two KS4U1031F28 Potentiometers.

(4) Install kept dimming knobs and set screws onto the two KS4U1031F28 Potentiometers.

D. (Refer to Figure 1, Sheet 7.) Add and re-locate the wires to the R9 KS4U1031F28 Potentiometer as shown in Figure 1 Sheet 7.

(1) If the wiring to the new potentiometer needs to be extended then do as follows:

NOTE: It may be necessary to install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire to extend the wires to reach the terminal lugs.

(a) Install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire as required on the electrical wires for each KS4U1031F28 Potentiometer.

(b) Install the 106242C31 Heat Shrink Tubing over the newly extended wiring.

(c) Using a heat gun, install the 106242C31 Heat Shrink Tubing over the electrical wires as required.

(2) Use a soldering iron to connect the wires to each potentiometer terminal.

NOTE: The potentiometer terminals can be hooks or lugs. The wire installation procedures are the same.

E. (Refer to Figure 1, Sheet 8.) Add and re-locate the wires to the R11 KS4U1031F28 Potentiometer as shown in Figure 1 Sheet 8.

(1) If the wiring to the new potentiometer needs to be extended then do as follows:

NOTE: It may be necessary to install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire to extend the wires to reach the terminal lugs.

(a) Install M81824/1-2 Splices and M22759/16-20-9 Electrical Wire as required on the electrical wires for each KS4U1031F28 Potentiometer.

(b) Install the 106242C31 Heat Shrink Tubing over the newly extended wiring.

(c) Using a heat gun, install the 106242C31 Heat Shrink Tubing over the electrical wires as required.

(2) Use a soldering iron to connect the wires to each potentiometer terminal.

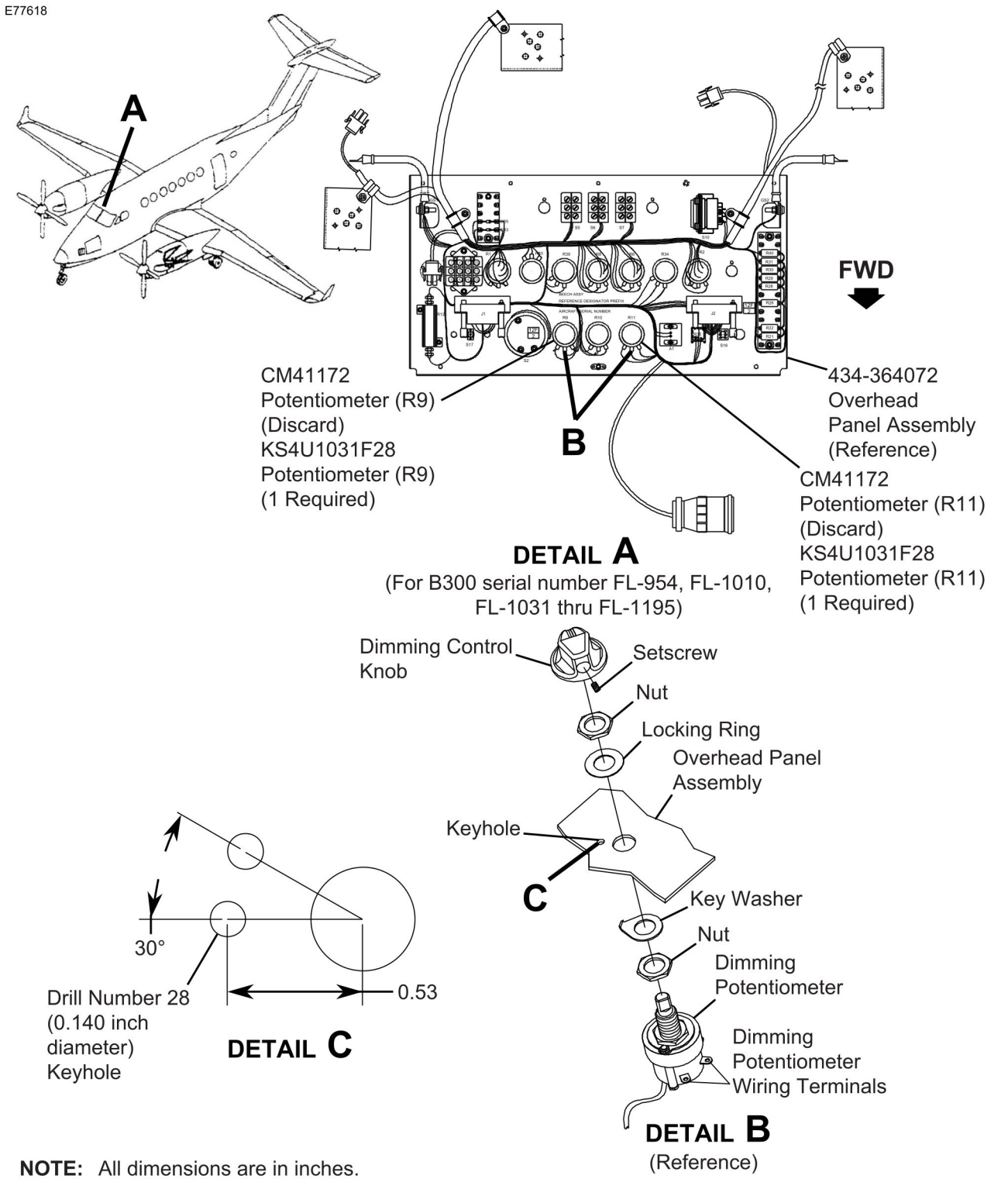
NOTE: The potentiometer terminals can be hooks or lugs. The wire installation procedures are the same.

F. Using an indelible marker, relabel the modified wire harness as 130M365002-0031.

10. Install the overhead instrument panel assembly with the retained screws. (Refer to the applicable Maintenance Manual, Chapter 31, Overhead Instrument Panel - Removal/Installation.)
11. Install the overhead electroluminescent panel. (Refer to the applicable Maintenance Manual, Chapter 33, Electroluminescent Panel - Removal/Installation.)
12. Remove the maintenance warning tags and connect the airplane battery.
13. Put the BATT Switch to the ON position.
14. Do an operational test of KS4U1031F28 Potentiometer(s) by rotating the rotary knob and make sure that the associated lights are dimming.
15. Make an entry in the airplane logbook that states compliance and method of compliance with this service document.

NOTE: Textron Aviation recommends that compliance with all service documents is reported to a maintenance tracking system provider.

- Complete a record of compliance. (Maintenance Transaction Report, Log Book Entry, or other record of compliance.)
- Put a copy of the completed record of compliance in the airplane logbook.
- Send a copy of the completed record of compliance to the maintenance tracking system provider used.

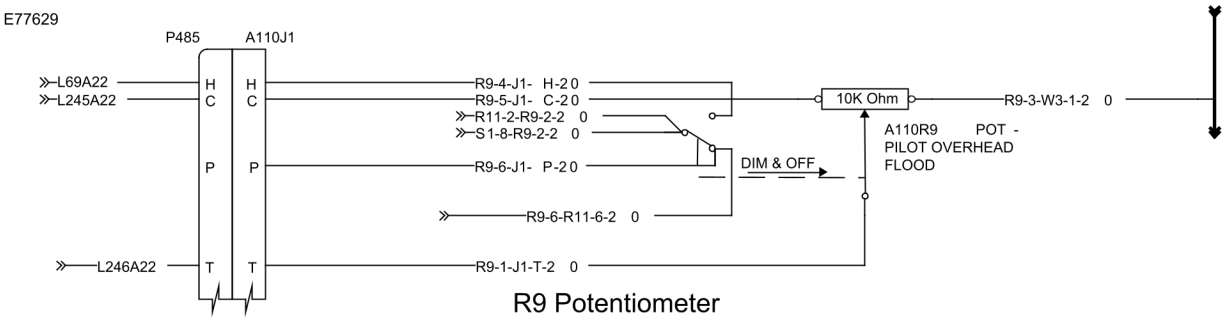


NOTE: All dimensions are in inches.

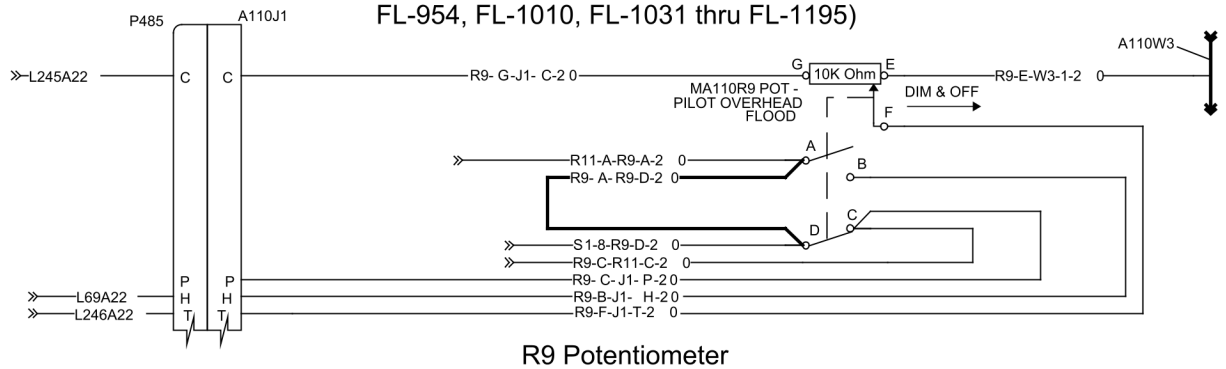
NOTE: The model shown is a B300, yet the location of the dim potentiometer is the same for all models.

A6918T1269
130M364280-2

Figure 1. Potentiometer Replacement (Sheet 1)

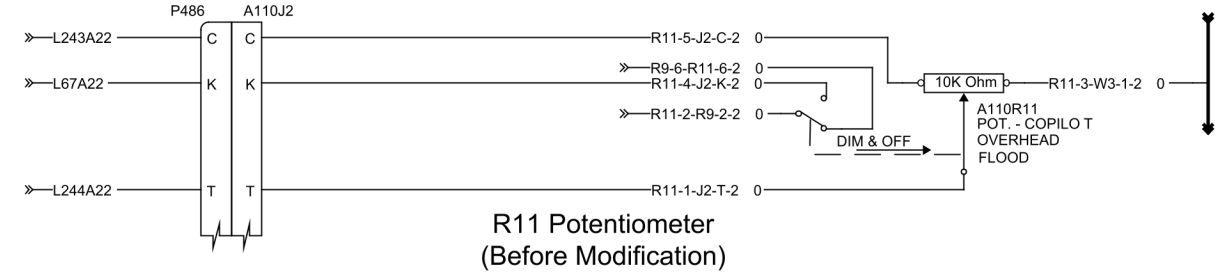


R9 Potentiometer
(Before Modification)
(Model B300 serial number
FL-954, FL-1010, FL-1031 thru FL-1195)

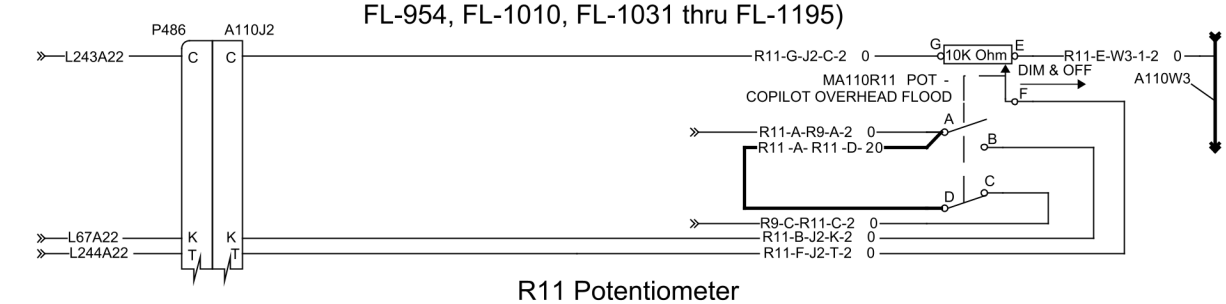


R9 Potentiometer
(After Modification)
(Model B300 serial number
FL-954, FL-1010, FL-1031 thru FL-1195)

Legend	
———	New Wire
———	Existing Wire



R11 Potentiometer
(Before Modification)
(Model B300 serial number
FL-954, FL-1010, FL-1031 thru FL-1195)



R11 Potentiometer
(After Modification)
(Model B300 serial number
FL-954, FL-1010, FL-1031 thru FL-1195)

Figure 1. Potentiometer Replacement (Sheet 2)

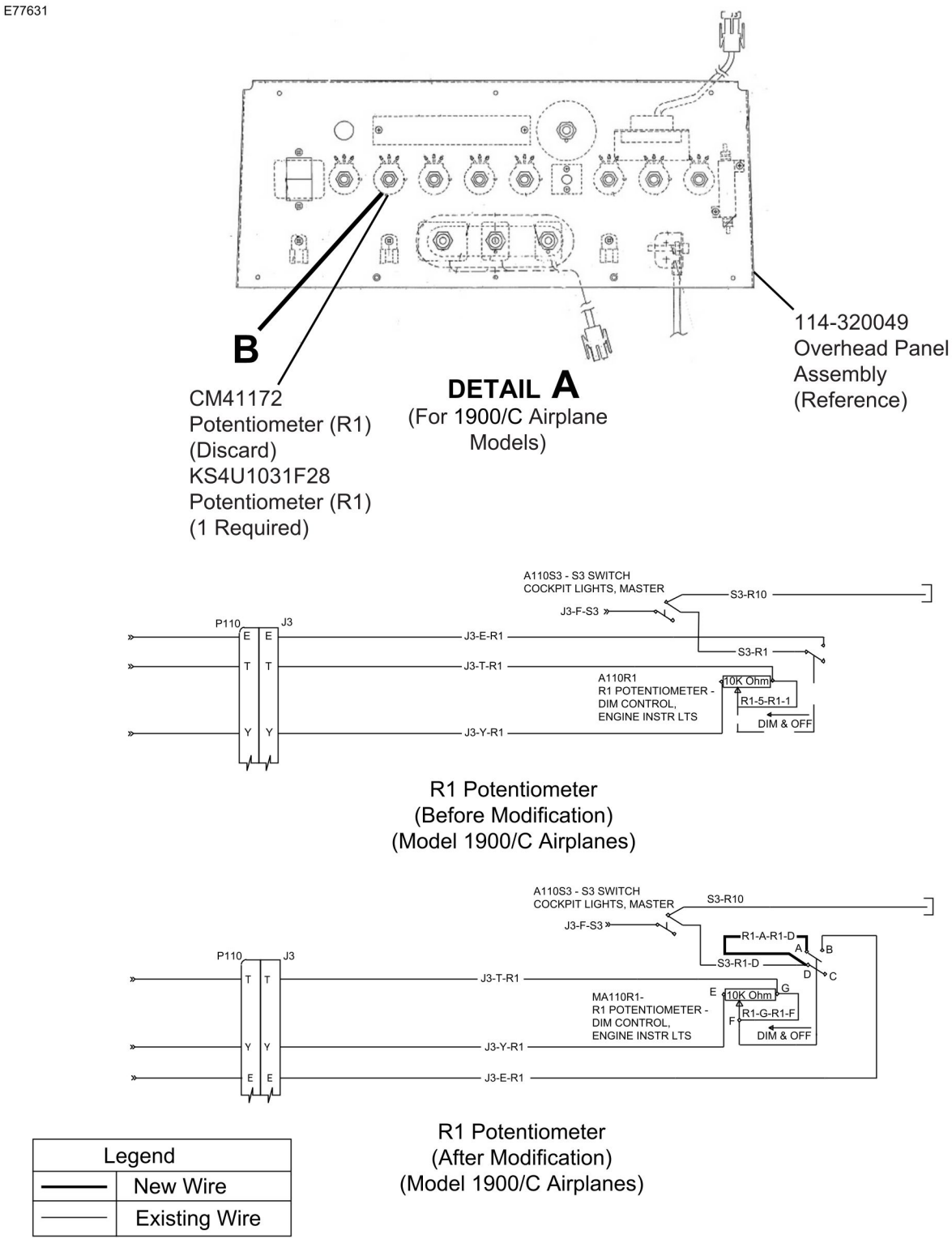
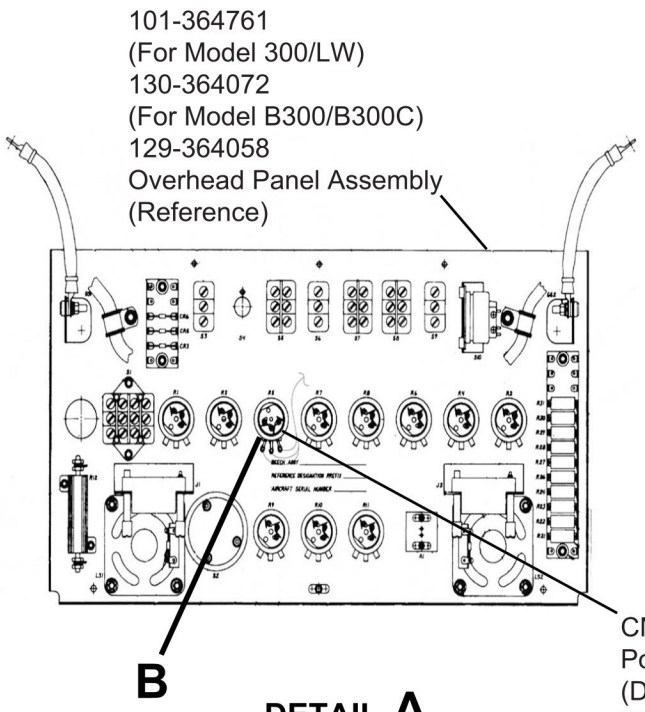
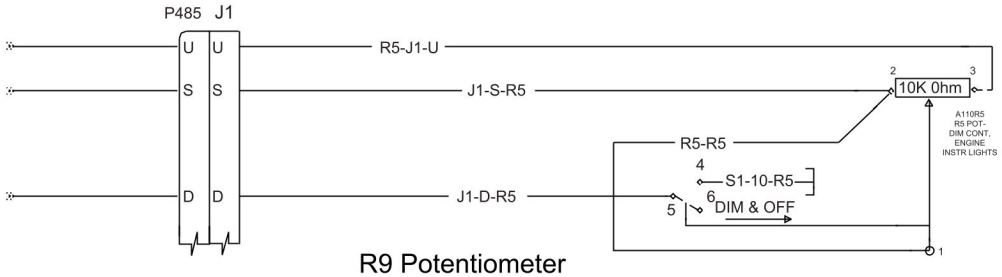


Figure 1. Potentiometer Replacement (Sheet 3)

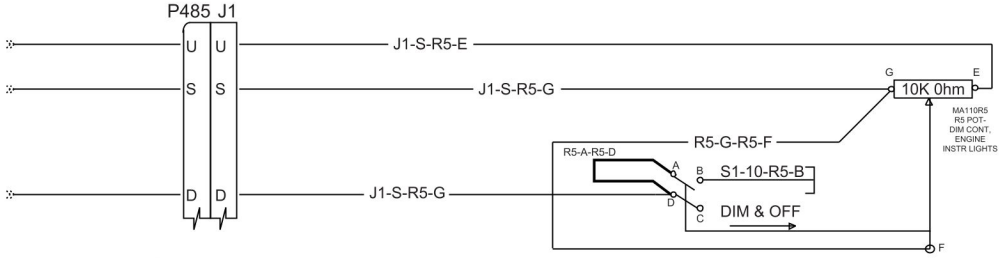
E77630



DETAIL A
(For B300/B300C, 300/300LW Airplane Models)



R9 Potentiometer
(Before Modification)
(For B300/B300C, 300/300LW Airplane Models)

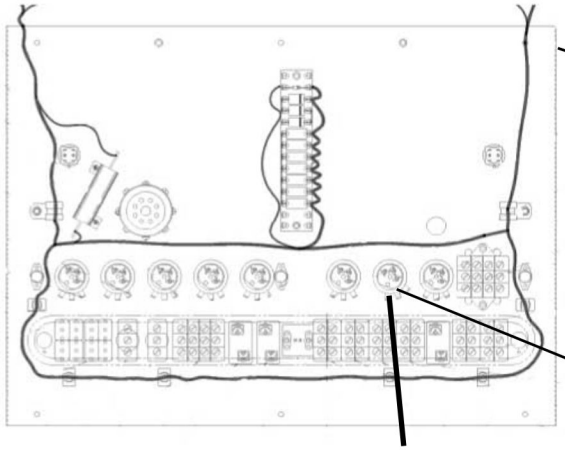


Legend	
———	New Wire
———	Existing Wire

R9 Potentiometer
(After Modification)
(For B300/B300C, 300/300LW Airplane Models)

Figure 1. Potentiometer Replacement (Sheet 4)

E77710



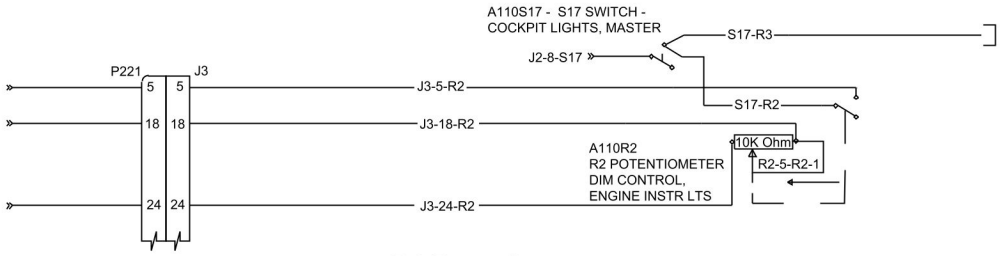
129-364058
Overhead Panel
Assembly
(Reference)

CM41172
Potentiometer (R2)
(Discard)
KS4U1031F28
Potentiometer (R2)
(1 Required)

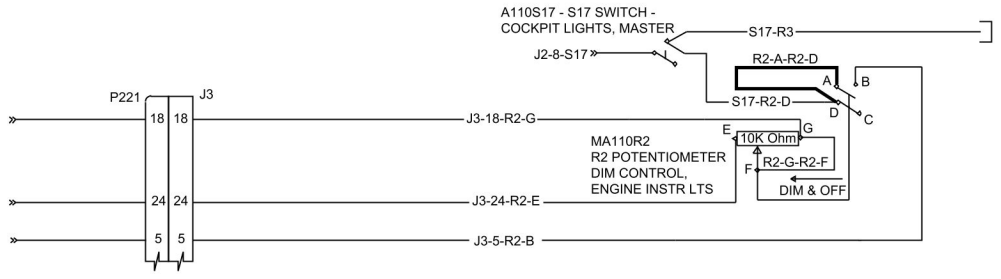
FWD

B

DETAIL A
(For 1900D Airplane Models)



R2 Potentiometer
(Before Modification)
(Model 1900D Airplanes)

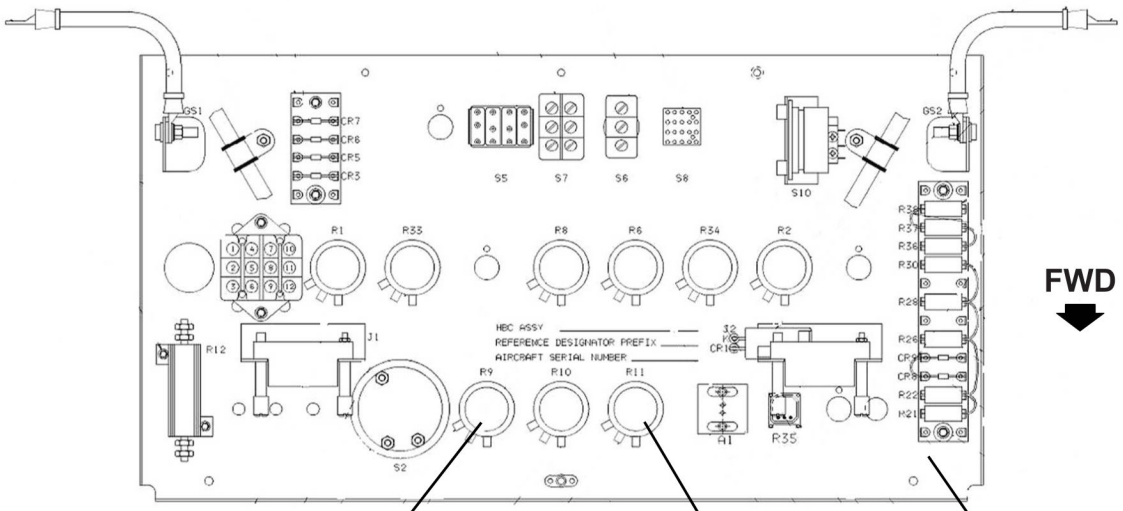


R2 Potentiometer
(After Modification)
(Model 1900D Airplanes)

Legend	
———	New Wire
———	Existing Wire

Figure 1. Potentiometer Replacement (Sheet 5)

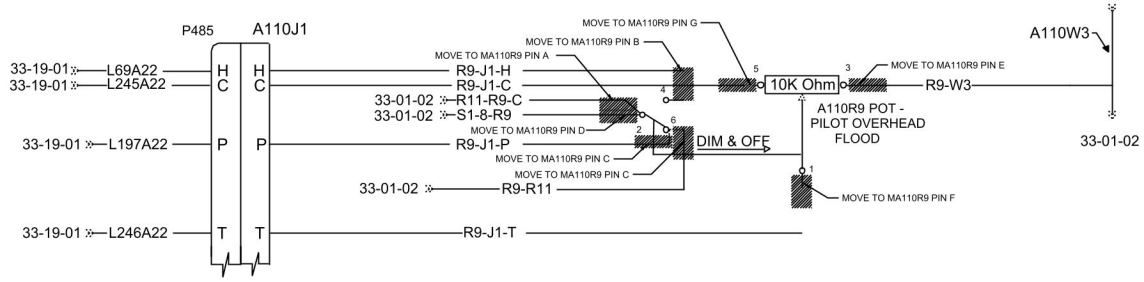
E77943



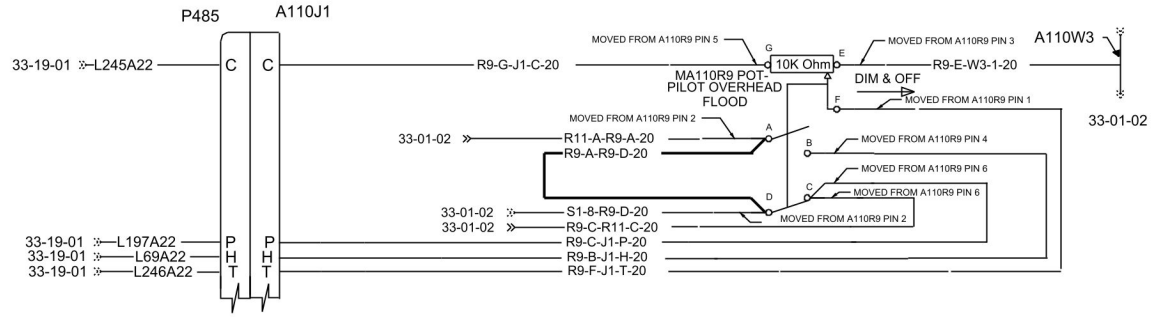
NOTE: This view only applies to B300 model airplanes with serial numbers FL-601, FL-672, FL-688 thru FL953, FL-955 thru FL-1009, FL-1011 thru FL-1030 and for B300C model airplanes with serial numbers FM-36 THRU FM-65.

Figure 1. Potentiometer Replacement (Sheet 6)

E77944



R9 Potentiometer
(Before Modification)



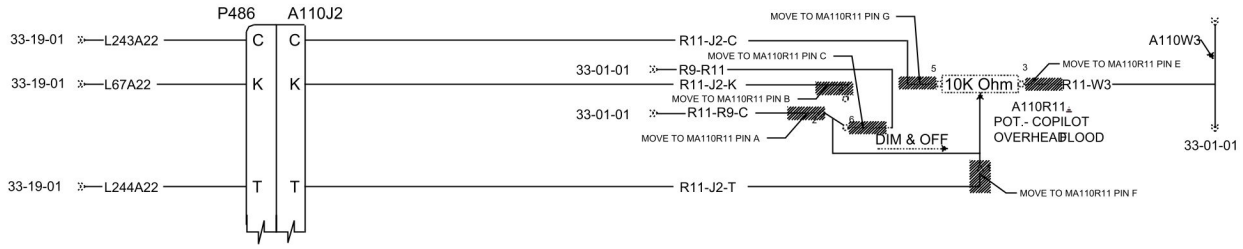
R9 Potentiometer
(After Modification)

Legend	
———	New Wire
———	Existing Wire

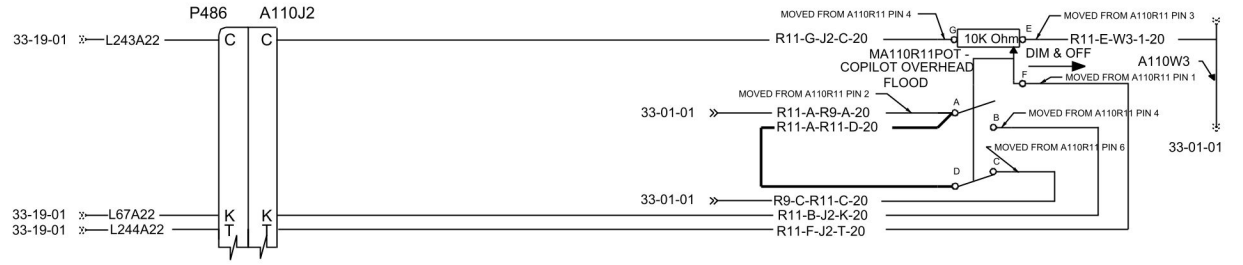
NOTE: This only applies to the following airplane serial numbers: FL-601, FL-672, FL-688 thru FL-953, FL-955 thru FL-1009, FL-1011 thru FL-1030 and FM-36 thru FM-65 .

Figure 1. Potentiometer Replacement (Sheet 7)

E77949



R11 Potentiometer
Before Modification



R11 Potentiometer
After Modification

Legend	
———	New Wire
———	Existing Wire

NOTE: This only applies to the following airplane serial numbers: FL-601, FL-672, FL-688 thru FL-953, FL-955 thru FL-1009, FL-1011 thru FL-1030 and FM-36 thru FM-65.

Figure 1. Potentiometer Replacement (Sheet 8)

MATERIAL INFORMATION

For model B300 airplanes with serial numbers FL-954, FL-1010, FL-1031 thru FL-1195, FL-601, FL-672, FL-688 thru FL-953, FL-955 thru FL-1009, FL-1011 thru FL-1030, and model B300C airplanes with serial numbers FM-36 thru FM-65, order the parts below to install this modification.

NEW P/N	QUANTITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
KS4U1031F28	2	Potentiometer	CM41172	Discard
M81824/1-2	As Required	Splice		
106242C31	As Required	Heat Shrink Tube		
M22759/16-20-9	As Required	Electrical Wire		

For all other model airplanes, order the parts below to install this modification.

NEW P/N	QUAN-TITY	KEY WORD	OLD P/N	INSTRUCTIONS/ DISPOSITION
KS4U1031F28	1	Potentiometer	CM41172	Discard
M81824/1-2	As Required	Splice		
106242C31	As Required	Heat Shrink Tube		
M22759/16-20-9	As Required	Electrical Wire		

* Please contact your Regional Textron Aviation Parts Distribution Customer Support Team for current cost and availability of parts listed in this service document. Phone at 1-800-835-4000 (Domestic) or 1-316-517-5603 (International).

For more information, please visit the TAPD Support & Aftermarket Account Management website at https://ww2.txtav.com/Parts/Promos/TAPD.

Based on availability and lead times, parts may require advanced scheduling.

TITLE

INDICATING/RECORDING SYSTEMS - POTENTIOMETER REPLACEMENT

TO:

Beechcraft Model 300/300LW, B300, B300C, 1900, 1900C, and 1900D Aircraft Owner

REASON

The CM41172 Potentiometer is obsolete and is replaced with the KS4U1031F28 Potentiometer.

COMPLIANCE

OPTIONAL. This service document can be accomplished at the discretion of the owner.

LABOR HOURS

WORK PHASE	LABOR-HOURS
Modification	As Necessary
Test and Inspection	As Necessary

MATERIAL AVAILABILITY

PART NUMBER	AVAILABILITY	COST
KS4U1031F28	*	*
M81824/1-2	*	*
106242C31	*	*
M22759/16-20-9	*	*

* Please contact Textron Aviation Parts Distribution for current cost and availability of parts listed in this service document. Phone at 1-800-835-4000 (Domestic) or 1-316-517-5603 (International). Send email to: parts@txtav.com.

Based on availability and lead times, parts may require advanced scheduling.

WARRANTY

None

NOTE: As a convenience, service documents are now available online to all our customers through a simple, free-of-charge registration process. If you would like to sign up, please visit the Customer Access link at support.txtav.com to register.

Textron Aviation Customer Service, P.O. Box 7706, Wichita, KS 67277, U.S.A. 1-316-517-5800