SUBJECT: Improve Dimmer Function of Panel Lights

MODELS/ SN AFFECTED: M20U Ovation Ultra - 32-0002
M20V Acclaim Ultra - 33-0002, 33-0003, 33-0005

TIME OF COMPLIANCE: At Owner's Convenience

INTRODUCTION: Mooney International Corporation discovered the panel lights failed to power off when the NAV circuit breaker was pulled on M20U and M20V Ultra aircraft. The factory found the issue of a wire connected to the NAV circuit breaker that was feeding power to the panel lights. This service bulletin provides instructions on moving the relay power from the NAV circuit breaker to the panel light circuit breaker. No safety issue is connected with this service bulletin.

INSTRUCTIONS: Read entire procedures before beginning work.

1.1. Turn the Master Switch off.

1.2. Remove/disconnect the following components. Refer to the applicable Mooney Service and Maintenance Manual for more information and procedures.
   - Remove the co-pilot's seat (optional, as required).
   - Remove the upper right-hand surround panel.
   - Remove the upper left-hand surround panel (as required).
   - Remove the front right-hand pillar post panel.
   - Remove the instrument panel right-hand surround panel (optional, as required).
   - Gain access to the PSU unit.

1.3. Above the PSU panel on the PSU wire harness, locate and disconnect the Headliner #2 PL/RC26A connectors. De-pin the LN01P20 and LN01C20 wires from pin E of the PSU Headliner #2 connector. Disconnect LN01P20 push-on terminal from the NAV Light Relay terminal #7. Remove and discard the 201570-1 pin that was de-pinned from pin E and the LN01P20 wire segment. See Figure SB M20-330-1.

1.4. Terminate a new 201578-1 pin onto the existing LN01C20 wire and reinsert the wire back into pin E of the PSU Headliner #2 connector. See Figure SB M20-330-1.

1.5. Terminate the 640903-1 push-on terminal onto the new LP06H20 36” 919026-044/20 wire segment and connect the terminal to the NAV Relay terminal #7 where the previous wire segment was removed. Route and secure the wire along the existing PSU harness to the Headliner #2 connector. Trim wire length as required, terminate a new 201578-1 pin onto this wire, and insert wire into pin D of the connector. See Figure SB M20-330-1.

1.6. Locate and disconnect the Dimmer Control plug located under the right side of the instrument panel. De-pin pin 6 from the connector and remove the 201580-1 socket from the LP06B20 wire segment. See Figure SB M20-330-2.

1.7. Terminate a new 201580-1 socket onto the new LP06G20 97” 919026-044/20 wire segment and insert into pin D on the aircraft side of the Headliner #2 connector. Route and secure the wire following the existing harness down the right-hand forward pillar to the Dimmer Control connector. See Figure SB M20-330-2.
THIS BULLETIN DOES NOT CHANGE AIRCRAFT TYPE DESIGN

1.8. Trim wire length as required and terminate a 201333-1 socket, combining the existing LP06B20 and new LP06G20 wire segments at the Dimmer Control connector. Insert the new socket back into pin 6 where the LP06B20 wire was previously de-pinned. See Figure SB M20-330-2.

1.9. Perform a point-to-point continuity check of the newly installed wire segments. If check shows as good, reconnect and re-secure Headliner #2 and Dimmer Control connectors. If check shows as bad, verify and troubleshoot until corrected. See Figure SB M20-330-2.

1.10. Reinstall previously removed interior components from step 1.2 in reverse order and return aircraft to service.

WARRANTY: Mooney International Corporation will warrant labor 12 hours in accordance with procedures of this service bulletin. If further action is needed, please email support@mooney.com and a representative will be in contact with you.


Parts Kit P/N: Service Bulletin Kit M20-330–001

<table>
<thead>
<tr>
<th>Item</th>
<th>P/N</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>201578–1</td>
<td>Pin</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>919026–044/20</td>
<td>LP06H20 Wire – 36&quot;</td>
<td>1</td>
</tr>
<tr>
<td>3.</td>
<td>200333–1</td>
<td>Socket</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>201580–1</td>
<td>Socket</td>
<td>1</td>
</tr>
<tr>
<td>5.</td>
<td>919026–044/20</td>
<td>LP06G20 Wire – 97&quot;</td>
<td>1</td>
</tr>
<tr>
<td>6.</td>
<td>640903–1</td>
<td>Terminal, Push-On</td>
<td>1</td>
</tr>
</tbody>
</table>
THIS BULLETIN DOES NOT CHANGE AIRCRAFT TYPE DESIGN

Previous:

![Previous Diagram](image1)

Remove:
- 201570-1 Pin
- 919026-044/20 24”
- LN01C20 (REF)

New:

![New Diagram](image2)

Add:
- 201578-1 Pin
- 919026-0474/20 24”
- LN01C20 (REF)

Add:
- 201578-1 Pin

Figure SB M20-330-1 – Rewire Headliner #2
Figure SB M20-330-2 – Route Additional Wire from Dimmer Control Plug 6 to Headliner #2
MOONEY INTERNATIONAL CORPORATION
KERRVILLE, TEXAS 78028 – FAX 830−257−4635

SERVICE (BULLETIN) (INSTRUCTION) NO.________________HAS BEEN COMPLIED
WITH ON AIRCRAFT MODEL __________ SERIAL NUMBER __________

Tach. Time: ________________ N-Number ____________ (Reg. No.)
Owner: __________________________ Date of Compliance: ________________
_____________ __________________________ Complied
Complied
By: __________________________________________

Inspection Report: __________________________________________
__________________________
__________________________

Form 07-0001

MOONEY INTERNATIONAL CORPORATION
ATT’N: TECHNICAL SUPPORT
165 Al Mooney Road North
Kerrville, Texas 78028

SEND TO: Mooney International Corporation
165 Al Mooney Road North
Kerrville, TX 78028
FAX: (830) 257-4635 or EMAIL support@mooney.com

Figure SB M20-330-3 – Compliance Card